CRL Method #: MS026ra7.0 CRL Sample Batch Number(s) B112021
CRL Work Order Number(s) 1112001
Site Name: Blue Island Phenols
ESAT TDF Number _____ (For ESAT Data Packages)

Analyst/Date (QC1): Danielle Kleinmaier 12/30/11
Secondary Reviewer/Date (QC2): Wayne J. Whipple Jan 4 2012

NOTE: Please check Y for YES, NA for Not Applicable and X for NO. If X, please provide your comments in the comments section.

		Approvals QC1	QC2
I.	**SAMPLE QC**		
	Sample Preservation – work order		
1.	Were the samples received properly preserved?	Y	Y
	Instrument Performance Check – Enviroforms Form 5, tune evaluation report, tailing factor reports, raw data		
2.	Does the instrument performance check meet the SOP criteria?	Y	Y
3.	Is the report accurate? Are the associated samples properly listed?	Y	Y
4.	Are all samples analyzed within the 12- or 24-hour clock?	Y	Y
	Initial Calibration (IC) – RRF report, initial calibration report		
5.	Does the IC QC meet the SOP criteria?	Y	Y
6.	Calculate both a RSD and a RRF or verify a regression fit. Is it accurate?	Y	Y
	Continuing Calibration (CC) – evaluate continuing calibration report		
7.	Does the CC QC meet the SOP criteria?	Y	Y
8.	Calculate a %D. Is the %D accurate?	Y	Y
	Internal Standards (IS) – Enviroforms Form 8, internal standard area and retention time comparison		
9.	Samples met IS area requirements? If not, sample data properly qualified?	Y	Y
10.	Samples met IS time requirements? If not, sample data properly qualified?	Y	Y
	Method Blank Summary – Enviroforms Form 4, raw data, bench sheet		
11.	Is the Method Blank Summary header correct?	Y	Y
12.	Are the associated samples properly listed?	Y	Y
13.	Are sample data properly qualified if the blank conc is above the reporting limit and within a factor of 10 of sample concentrations, or above the MDL and within a factor of 5 of sample concentrations?	Y	Y
	MS/MSD or LCS/LCSD – raw data, LIMS reports, Data Entry Table		
14.	Are MS/MSD and LCS/LCSD recoveries acceptable? If not, data qualified?	Y	Y
15.	Are reported concentrations in agreement with the raw data?	Y	Y

17. Data Review Checklist (Cont'd)

		Approvals QC1	QC2
	Surrogate Recoveries – raw data, LIMS reports, Data Entry Table		
16.	Are surrogate recoveries acceptable? If not, data qualified?	Y	y
17.	Are reported concentrations and percent recovery data in agreement with the quantitation reports and QC forms?	Y	y
II.	QUANTITATION REPORTS and TC & TIC RESULTS of SAMPLES		
1.	Are draft LIMS reports present for all field samples and QC samples, if applicable?	Y	y
2.	Are reported results for detects and non-detects accurate?	Y	y
3.	Did mass spectral data support all reported TC and TIC data?	Y	y
4.	Are the following LIMS data qualifiers used, when needed: J, K, L, MI, N, NJ, R and U?	Y	y
5.	Are final LIMS reports present for all field samples and lab blanks? (Note: CRL keeps the original FINAL report, and the client gets a copy)		—
6.	Are final LIMS reports and complete data packages present in duplicate for enforcement cases?	—	—
III.	MANUAL INTEGRATION AUDIT (See QMP Appendix 2 for CRL manual integration policy and procedures)		
1.	Are graphic printouts submitted showing all manual integrations before and after the manual integrations ?	Y	y
IV.	MISCELLANEOUS		
1.	Are the following documents submitted with the data package, when available: sample analysis request sheets/COC forms, sample tags, sequence files identifying sample data files used for reporting, completed sample prep/clean-up sheets, and data not used?	Y	y
2.	Are the following documents filed in proper binders: GC/MS autotune reports, daily manual tune or mass axis calibration reports, DFTPP tune reports, calibration reports, and sample sequences?	Y	y
3.	Is the bench sheet complete? Are the LIMS IDs for all spiking solutions and calibration standards and all solvent lot numbers used in the analysis documented in the package?	Y	y
4.	Is a printout of the work order(s) included?	Y	y
V.	CASE NARRATIVE		
1.	Is the case narrative accurate? Are QC outliers explained?	Y	y
2.	Are the narrative, report, and supporting data files backed up to R5CRL?	Y	y

Please make sure the following changes to the case narrative have been made:

1. **No longer include sample identifications or instrument designations; these are documented in the raw data and LIMS reports.**
2. **Include the # of samples done, the work order number(s) and the name of the survey. Do not include the name of any other survey in the narrative. If you need to refer to another group of samples, use the work order number.**
3. **Type the path for data storage. Include the path in a note to the file or on the review checklist. Hand printed paths are very difficult to read. Please do not write them.**
4. **Make a positive statement that the holding times were met. State if there were any exceptions.**
5. **Discuss the preparation steps only if there are options. If the preparation is part of the SOP, no discussion is necessary. List any cleanup procedures used if these are optional. If cleanup is a standard part of the method, no discussion is needed.**
6. **Comment on quality excursions by quality control type with headers stating the control type. All headers will not be present every time. If there are no exceptions, remove that header. State the impact of the excursions on the data. If several QC types have problems, state the overall impact on the data at the end after discussing the parts. Include a general statement that all quality control not specifically discussed in the narrative met quality criteria stated in the SOP.**

		Approvals QC1	QC2
VI.	**DATA CUSTODY and TIME TRACKING (For ESAT Data Packages Only)**		
1.	**Are the data set custody transfer and time tracking sheet present and accurate?**	N/A	

VII. COMMENTS

Specify the path for data storage (see GEN002 for requirements)

Example of R5CRL Data Path: 204.46.24.26\R5CRL\VOL1\~~EPA-GCMS\"analysis"\"work order"\.....~~

Path: MS\SVOA\2011\111201 LLE

Analyst Signature: Danielle Kleinman **Date:** 12-30-11

Data Package Review approval for release

"All concerns with this data package documented by the reviewer have been resolved to the satisfaction of the reviewer. The reviewer, by signing, verifies that this package is complete and supports the reported results in accordance with the CRL Quality Management Plan and applicable standard operating procedures (SOPs)."

Reviewer Signature: _____ **Date:** 4 January 2012

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 CHICAGO REGIONAL LABORATORY

536 SOUTH CLARK STREET

CHICAGO, ILLINOIS 60605

LABORATORY ACCREDITATION BUREAU
ACCREDITED ISO/IEC 17025
Certificate # L2280 Testing

Date: 1/4/2012

Subject: Review of Region 5 Data for Blue Island Phenols

From: Danielle Kleinmaier DK 1/4/12
Region 5 Chicago Regional Laboratory

To: RCRA, LCD, US EPA Region 5
77 West Jackson Boulevard
Chicago, IL 60604

The data being transmitted under this cover memo successfully passed CRL's internal data review procedures as documented in our current Quality Management Plan (QMP) and appropriate Standard Operating Procedures (SOPs). Please be aware that CRL does not perform data validation which is based on your data quality objectives. This function must be performed independently of the laboratory generating the data.

Results in this report represent only the samples analyzed.

Please have the U.S. EPA Project Manager/Officer call the CRL Sample Coordinator at (312) 353-0375 for any comments or questions.

Attached are Results for: Blue Island Phenols

Sylvia Griffin 01-05-2012 A07:00 / /

Data Management Coordinator and Date Received

Date Transmitted: 01-05-2012 A07:00 ____/____/_____

Analyses included in this report:

SVOA Expanded List

RCRA, LCD, US EPA Region 5	Project: Blue Island Phenols	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Mike Beedle	Jan-04-12 13:02

Analysis: SVOA
Matrix: water
Project: Blue Island Phenols
Work Order #: 1112001
Analyst: Danielle Kleinmaier
Analyst Phone Number: 312.353.9771
Date: 1/4/2011

General Information

Six water samples were originally received for the Toxicity Characteristic Leaching Procedure (TCLP) of Semi-Volatile Organic Analysis (SVOA) compounds on September 13th, 2011 (work order 1109008). On December 6th 2011, the client requested that these same samples be re-evaluated for SVOA compounds by continuous liquid-liquid extraction (work order 1112001). Since the samples had exceeded their extraction holding times, all reported re-extraction data was flagged as estimated ('J').

Sample preparation and analysis occurred via the Chicago Regional Laboratory standard operating procedure (CRL SOP) MS026 Revision # 7.0.

All the supporting data for LIMS ID 1112001-08 (BIP-7, oil phase) is located in the data package for work order 1109008.

Sample Analysis and Results

All of the samples were re-extracted except for BIP-7. Phase separation had occurred in this sample container and the aqueous phase was no longer available. The organic/oil phase was simply diluted and analyzed. Since the organic phase was not extracted, no surrogates were spiked into that fraction of the sample. Separate LIMS IDs were generated for each phase of BIP-7. The organic phase was reported as LIMS ID 1112001-08. Since the aqueous phase could not be re-extracted, LIMS IDs 1112001-06 and -07 do not appear in the report.

Quality Controls

Instrument Performance Check

The benzidine tailing factor failed the instrument performance check criteria in the DFTPP injection for the 10/31/11 sequence (6C11103101.D), affecting the waste dilution of field sample BIP-7 (LIMS ID 1112001-08).

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77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Mike Beedle	Jan-04-12 13:02

The instrument sensitivity for the basic compounds analyzed after said failed tailing factor was demonstrated by a 1 ng/uL calibration standard injection at the end of the sequence. All basic compounds were recovered with the exception of 4-chloroaniline and 1,3,5-trinitrobenzene. These two compounds do not appear in the report for LIMS ID 1112001-08.

Continuing Calibration Verification (CCV)

The closing CCV injection affecting the injections of undiluted field samples BIP-2 (LIMS ID 1112001-02), BIP-4 (LIMS ID 1112001-04), and BIP-5 (LIMS ID 1112001-05) analyzed on 12/22/11 exceeded the % difference criteria of $\leq 25\%$ for hexachlorocyclopentadiene.

The CCV injections bracketing the injection of the waste dilution of field sample BIP-7 (LIMS ID 1112001-08) analyzed on 10/31/11 exceeded the %D criteria for pentachlorophenol and benzidine.

Results for these compounds were flagged as estimated ('J') in the report.

Blank Spike Recovery (B112021)

In both the blank spike and blank spike duplicate, 2,4-dimethylphenol and hexachloropropene had calculated recoveries below their respective lower control limits. Neither of these compounds were detected in any of the field samples. These compounds were flagged as estimated ('J') in the report.

Hexachlorocyclopentadiene was not recovered in either blank spike QC sample. This compound was not detected in any of the field samples and was, thus, rejected.

All other quality controls not mentioned here passed the SOP criteria.

Signature Danielle K Simmons Date 1-4-12

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RCRA, LCD, US EPA Region 5	Project: Blue Island Phenols	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Mike Beedle	Jan-04-12 13:02

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BIP-1	1112001-01	Water	Sep-13-11 09:15	Dec-06-11 12:37
BIP-2	1112001-02	Water	Sep-13-11 09:21	Dec-06-11 12:37
BIP-3	1112001-03	Water	Sep-13-11 09:29	Dec-06-11 12:37
BIP-4	1112001-04	Water	Sep-13-11 10:07	Dec-06-11 12:37
BIP-5	1112001-05	Water	Sep-13-11 10:18	Dec-06-11 12:37
BIP-7, 9008-07 oil phase	1112001-08	Soil	Sep-13-11 11:17	Dec-06-11 12:37

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RCRA, LCD, US EPA Region 5	Project: Blue Island Phenols	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Mike Beedle	Jan-04-12 13:02

Semivolatiles by GC/MS, EPA 8270C (modified)
US EPA Region 5 Chicago Regional Laboratory

BIP-1 (1112001-01) Water Sampled: Sep-13-11 09:15 Received: Dec-06-11 12:37

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
N-Nitrosodimethylamine	U	J		4.17	ug/L	1	B112021	Dec-13-11	Dec-22-11
Pyridine	U	J		4.17	"	"	"	"	"
2-Picoline	U	J		4.17	"	"	"	"	"
N-Nitrosomethylethylamine	U	J		4.17	"	"	"	"	"
N-Nitrosodiethylamine	U	J		4.17	"	"	"	"	"
Ethyl methanesulfonate	U	J		4.17	"	"	"	"	"
Aniline	U	J		4.17	"	"	"	"	"
Phenol	U	J		4.17	"	"	"	"	"
Pentachloroethane	U	J		20.8	"	"	"	"	"
Bis(2-chloroethyl)ether	U	J		4.17	"	"	"	"	"
2-Chlorophenol	U	J		4.17	"	"	"	"	"
1,3-Dichlorobenzene	U	J		4.17	"	"	"	"	"
1,4-Dichlorobenzene	U	J		4.17	"	"	"	"	"
1,2-Dichlorobenzene	U	J		4.17	"	"	"	"	"
2-Methylphenol	U	J		4.17	"	"	"	"	"
Bis(2-chloroisopropyl)ether	U	J		4.17	"	"	"	"	"

Danielle Kleinmaier

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RCRA, LCD, US EPA Region 5	Project: Blue Island Phenols	
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Chicago IL, 60604	Project Manager: Mike Beedle	Jan-04-12 13:02

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US EPA Region 5 Chicago Regional Laboratory

BIP-1 (1112001-01) Water Sampled: Sep-13-11 09:15 Received: Dec-06-11 12:37

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
N-Nitrosopyrrolidine	U	J		4.17	ug/L	1	B112021	Dec-13-11	Dec-22-11
Acetophenone	U	J		4.17	"	"	"	"	"
N-Nitroso-di-n-propylamine	U	J		4.17	"	"	"	"	"
o-Toluidine	U	J		4.17	"	"	"	"	"
3-&/or 4-Methylphenol	U	J		41.7	"	"	"	"	"
Hexachloroethane	U	J		4.17	"	"	"	"	"
Nitrobenzene	U	J		4.17	"	"	"	"	"
N-Nitrosopiperidine	U	J		4.17	"	"	"	"	"
Isophorone	U	J		4.17	"	"	"	"	"
2-Nitrophenol	U	J		4.17	"	"	"	"	"
2,4-Dimethylphenol	U	J		4.17	"	"	"	"	"
Bis(2-chloroethoxy)methane	U	J		4.17	"	"	"	"	"
2,4-Dichlorophenol	U	J		4.17	"	"	"	"	"
1,2,4-Trichlorobenzene	U	J		4.17	"	"	"	"	"
Naphthalene	U	J		4.17	"	"	"	"	"
2,6-Dichlorophenol	U	J		4.17	"	"	"	"	"

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US EPA Region 5 Chicago Regional Laboratory

BIP-1 (1112001-01) Water Sampled: Sep-13-11 09:15 Received: Dec-06-11 12:37

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
4-Chloroaniline	U	J		4.17	ug/L	1	B112021	Dec-13-11	Dec-22-11
Hexachloropropene	U	J		4.17	"	"	"	"	"
Hexachlorobutadiene	U	J		4.17	"	"	"	"	"
N-Nitrosodi-n-butylamine	U	J		4.17	"	"	"	"	"
4-Chloro-3-methylphenol	U	J		4.17	"	"	"	"	"
Safrole	U	J		4.17	"	"	"	"	"
2-Methylnaphthalene	U	J		4.17	"	"	"	"	"
Hexachlorocyclopentadiene	Rejected			20.8	"	"	"	"	"
1,2,4,5-Tetrachlorobenzene	U	J		4.17	"	"	"	"	"
2,4,6-Trichlorophenol	U	J		4.17	"	"	"	"	"
2,4,5-Trichlorophenol	U	J		4.17	"	"	"	"	"
Isosafrole	U	J		4.17	"	"	"	"	"
2-Chloronaphthalene	U	J		4.17	"	"	"	"	"
2-Nitroaniline	U	J		4.17	"	"	"	"	"
Dimethylphthalate	U	J		4.17	"	"	"	"	"
1,3-Dinitrobenzene	U	J		4.17	"	"	"	"	"

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Semivolatiles by GC/MS, EPA 8270C (modified)
US EPA Region 5 Chicago Regional Laboratory

BIP-1 (1112001-01) Water Sampled: Sep-13-11 09:15 Received: Dec-06-11 12:37

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
2,6-Dinitrotoluene	U	J		4.17	ug/L	1	B112021	Dec-13-11	Dec-22-11
Acenaphthylene	U	J		4.17	"	"	"	"	"
3-Nitroaniline	U	J		20.8	"	"	"	"	"
Acenaphthene	U	J		4.17	"	"	"	"	"
2,4-Dinitrophenol	U	J		4.17	"	"	"	"	"
Pentachlorobenzene	U	J		4.17	"	"	"	"	"
4-Nitrophenol	U	J		20.8	"	"	"	"	"
Dibenzofuran	U	J		4.17	"	"	"	"	"
2,4-Dinitrotoluene	U	J		4.17	"	"	"	"	"
2,3,4,6-Tetrachlorophenol	U	J		4.17	"	"	"	"	"
Diethylphthalate	U	J		4.17	"	"	"	"	"
Fluorene	U	J		4.17	"	"	"	"	"
4-Chlorophenylphenyl ether	U	J		4.17	"	"	"	"	"
5-Nitro-o-toluidine	U	J		4.17	"	"	"	"	"
4-Nitroaniline	U	J		4.17	"	"	"	"	"
4,6-Dinitro-2-methylphenol	U	J		20.8	"	"	"	"	"

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77 West Jackson Boulevard	Project Number: [none]	**Reported:**
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Semivolatiles by GC/MS, EPA 8270C (modified)
US EPA Region 5 Chicago Regional Laboratory

BIP-1 (1112001-01) Water Sampled: Sep-13-11 09:15 Received: Dec-06-11 12:37

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
Diphenylamine	U	J		4.17	ug/L	1	B112021	Dec-13-11	Dec-22-11
Azobenzene	U	J		4.17	"	"	"	"	"
1,3,5-Trinitrobenzene	U	J		4.17	"	"	"	"	"
Diallate (cis or trans)	U	J		4.17	"	"	"	"	"
Phenacetin	U	J		4.17	"	"	"	"	"
4-Bromophenyl phenyl ether	U	J		4.17	"	"	"	"	"
Hexachlorobenzene	U	J		4.17	"	"	"	"	"
Pentachlorophenol	U	J		20.8	"	"	"	"	"
Pentachloronitrobenzene	U	J		4.17	"	"	"	"	"
Pronamide	U	J		4.17	"	"	"	"	"
Phenanthrene	U	J		4.17	"	"	"	"	"
Dinoseb	U	J		20.8	"	"	"	"	"
Anthracene	U	J		4.17	"	"	"	"	"
Carbazole	U	J		4.17	"	"	"	"	"
Di-n-butylphthalate	U	J		4.17	"	"	"	"	"
Isodrin	U	J		4.17	"	"	"	"	"
Fluoranthene	5.00	J		4.17	"	"	"	"	"

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Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
Benzidine	U	J		4.17	ug/L	1	B112021	Dec-13-11	Dec-22-11
Pyrene	U	J		4.17	"	"	"	"	"
p-Dimethylaminoazobenzene	U	J		4.17	"	"	"	"	"
Chlorobenzilate	U	J		4.17	"	"	"	"	"
3,3'-Dimethylbenzidine	U	J		20.8	"	"	"	"	"
Butylbenzylphthalate	U	J		20.8	"	"	"	"	"
2-Acetylaminofluorene	**9.00**	J		4.17	"	"	"	"	"
Benzo (a) anthracene	U	J		4.17	"	"	"	"	"
3,3'-Dichlorobenzidine	U	J		4.17	"	"	"	"	"
Chrysene	U	J		4.17	"	"	"	"	"
Bis(2-ethylhexyl)phthalate	U	J		20.8	"	"	"	"	"
Di-n-octylphthalate	U	J		4.17	"	"	"	"	"
Benzo(b)fluoranthene	U	J		4.17	"	"	"	"	"
Benzo(k)fluoranthene	U	J		4.17	"	"	"	"	"
Benzo(a)pyrene	U	J		4.17	"	"	"	"	"
3-Methylcholanthrene	U	J		4.17	"	"	"	"	"
Indeno(1,2,3-cd)pyrene	U	J		4.17	"	"	"	"	"

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US EPA Region 5 Chicago Regional Laboratory

BIP-1 (1112001-01) Water Sampled: Sep-13-11 09:15 Received: Dec-06-11 12:37

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
Dibenz(a,h)anthracene	U	J		4.17	ug/L	1	B112021	Dec-13-11	Dec-22-11
Benzo(g,h,i)perylene	U	J		4.17	"	"	"	"	"
Surrogate: 2-Fluorophenol	68.2	J		*65.5 %*	*30.6-99.6*	"	"	"	
Surrogate: Phenol-d5	76.7	J		*73.6 %*	*34.2-102*	"	"	"	
Surrogate: Nitrobenzene-d5	82.3	J		*79.0 %*	*39.5-99.5*	"	"	"	
Surrogate: 2-Fluorobiphenyl	64.1	J		*61.6 %*	*33.6-102*	"	"	"	
Surrogate: 2,4,6-Tribromophenol	80.1	J		*76.9 %*	*65.7-126*	"	"	"	
Surrogate: Terphenyl-d14	89.0	J		*85.4 %*	*60.7-121*	"	"	"	

BIP-2 (1112001-02) Water Sampled: Sep-13-11 09:21 Received: Dec-06-11 12:37

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
N-Nitrosodimethylamine	U	J		12.5	ug/L	1	B112021	Dec-13-11	Dec-22-11
Pyridine	U	J		12.5	"	"	"	"	"
2-Picoline	U	J		12.5	"	"	"	"	"
N-Nitrosomethylethylamine	U	J		12.5	"	"	"	"	"
N-Nitrosodiethylamine	U	J		12.5	"	"	"	"	"
Ethyl methanesulfonate	U	J		12.5	"	"	"	"	"
Aniline	U	J		12.5	"	"	"	"	"
Phenol	U	J		12.5	"	"	"	"	"

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RCRA, LCD, US EPA Region 5	Project: Blue Island Phenols	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Mike Beedle	Jan-04-12 13:02

Semivolatiles by GC/MS, EPA 8270C (modified)
US EPA Region 5 Chicago Regional Laboratory

BIP-2 (1112001-02) Water Sampled: Sep-13-11 09:21 Received: Dec-06-11 12:37

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
Pentachloroethane	U	J		62.5	ug/L	1	B112021	Dec-13-11	Dec-22-11
Bis(2-chloroethyl)ether	U	J		12.5	"	"	"	"	"
2-Chlorophenol	U	J		12.5	"	"	"	"	"
1,3-Dichlorobenzene	U	J		12.5	"	"	"	"	"
1,4-Dichlorobenzene	U	J		12.5	"	"	"	"	"
1,2-Dichlorobenzene	U	J		12.5	"	"	"	"	"
2-Methylphenol	U	J		12.5	"	"	"	"	"
Bis(2-chloroisopropyl)ether	U	J		12.5	"	"	"	"	"
N-Nitrosopyrrolidine	U	J		12.5	"	"	"	"	"
Acetophenone	U	J		12.5	"	"	"	"	"
N-Nitroso-di-n-propylamine	U	J		12.5	"	"	"	"	"
o-Toluidine	U	J		12.5	"	"	"	"	"
3-&/or 4-Methylphenol	U	J		125	"	"	"	"	"
Hexachloroethane	U	J		12.5	"	"	"	"	"
Nitrobenzene	U	J		12.5	"	"	"	"	"
N-Nitrosopiperidine	U	J		12.5	"	"	"	"	"

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77 West Jackson Boulevard	Project Number: [none]	**Reported:**
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BIP-2 (1112001-02) Water Sampled: Sep-13-11 09:21 Received: Dec-06-11 12:37

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
Isophorone	U	J		12.5	ug/L	1	B112021	Dec-13-11	Dec-22-11
2-Nitrophenol	U	J		12.5	"	"	"	"	"
2,4-Dimethylphenol	U	J		12.5	"	"	"	"	"
Bis(2-chloroethoxy)methane	U	J		12.5	"	"	"	"	"
2,4-Dichlorophenol	U	J		12.5	"	"	"	"	"
1,2,4-Trichlorobenzene	U	J		12.5	"	"	"	"	"
Naphthalene	U	J		12.5	"	"	"	"	"
2,6-Dichlorophenol	U	J		12.5	"	"	"	"	"
4-Chloroaniline	U	J		12.5	"	"	"	"	"
Hexachloropropene	U	J		12.5	"	"	"	"	"
Hexachlorobutadiene	U	J		12.5	"	"	"	"	"
N-Nitrosodi-n-butylamine	U	J		12.5	"	"	"	"	"
4-Chloro-3-methylphenol	U	J		12.5	"	"	"	"	"
Safrole	U	J		12.5	"	"	"	"	"
2-Methylnaphthalene	U	J		12.5	"	"	"	"	"
Hexachlorocyclopentadiene	Rejected			62.5	"	"	"	"	"

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BIP-2 (1112001-02) Water Sampled: Sep-13-11 09:21 Received: Dec-06-11 12:37

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
1,2,4,5-Tetrachlorobenzene	U	J		12.5	ug/L	1	B112021	Dec-13-11	Dec-22-11
2,4,6-Trichlorophenol	U	J		12.5	"	"	"	"	"
2,4,5-Trichlorophenol	U	J		12.5	"	"	"	"	"
Isosafrole	U	J		12.5	"	"	"	"	"
2-Chloronaphthalene	U	J		12.5	"	"	"	"	"
2-Nitroaniline	U	J		12.5	"	"	"	"	"
Dimethylphthalate	U	J		12.5	"	"	"	"	"
1,3-Dinitrobenzene	U	J		12.5	"	"	"	"	"
2,6-Dinitrotoluene	U	J		12.5	"	"	"	"	"
Acenaphthylene	U	J		12.5	"	"	"	"	"
3-Nitroaniline	U	J		62.5	"	"	"	"	"
Acenaphthene	U	J		12.5	"	"	"	"	"
2,4-Dinitrophenol	U	J		12.5	"	"	"	"	"
Pentachlorobenzene	U	J		12.5	"	"	"	"	"
4-Nitrophenol	U	J		62.5	"	"	"	"	"
Dibenzofuran	U	J		12.5	"	"	"	"	"

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Semivolatiles by GC/MS, EPA 8270C (modified)
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BIP-2 (1112001-02) Water Sampled: Sep-13-11 09:21 Received: Dec-06-11 12:37

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
2,4-Dinitrotoluene	U	J		12.5	ug/L	1	B112021	Dec-13-11	Dec-22-11
2,3,4,6-Tetrachlorophenol	U	J		12.5	"	"	"	"	"
Diethylphthalate	U	J		12.5	"	"	"	"	"
Fluorene	U	J		12.5	"	"	"	"	"
4-Chlorophenylphenyl ether	U	J		12.5	"	"	"	"	"
5-Nitro-o-toluidine	U	J		12.5	"	"	"	"	"
4-Nitroaniline	U	J		12.5	"	"	"	"	"
4,6-Dinitro-2-methylphenol	U	J		62.5	"	"	"	"	"
Diphenylamine	U	J		12.5	"	"	"	"	"
Azobenzene	U	J		12.5	"	"	"	"	"
1,3,5-Trinitrobenzene	U	J		12.5	"	"	"	"	"
Diallate (cis or trans)	U	J		12.5	"	"	"	"	"
Phenacetin	U	J		12.5	"	"	"	"	"
4-Bromophenyl phenyl ether	U	J		12.5	"	"	"	"	"
Hexachlorobenzene	U	J		12.5	"	"	"	"	"
Pentachlorophenol	U	J		62.5	"	"	"	"	"

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BIP-2 (1112001-02) Water Sampled: Sep-13-11 09:21 Received: Dec-06-11 12:37

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
Pentachloronitrobenzene	U	J		12.5	ug/L	1	B112021	Dec-13-11	Dec-22-11
Pronamide	U	J		12.5	"	"	"	"	"
Phenanthrene	62.8	J		12.5	"	"	"	"	"
Dinoseb	U	J		62.5	"	"	"	"	"
Anthracene	U	J		12.5	"	"	"	"	"
Carbazole	U	J		12.5	"	"	"	"	"
Di-n-butylphthalate	U	J		12.5	"	"	"	"	"
Isodrin	U	J		12.5	"	"	"	"	"
Fluoranthene	142	J		12.5	"	"	"	"	"
Benzidine	U	J		12.5	"	"	"	"	"
Pyrene	101	J		12.5	"	"	"	"	"
p-Dimethylaminoazobenzene	U	J		12.5	"	"	"	"	"
Chlorobenzilate	U	J		12.5	"	"	"	"	"
3,3'-Dimethylbenzidine	U	J		62.5	"	"	"	"	"
Butylbenzylphthalate	U	J		62.5	"	"	"	"	"
2-Acetylaminofluorene	U	J		12.5	"	"	"	"	"
Benzo (a) anthracene	37.1	J		12.5	"	"	"	"	"
3,3'-Dichlorobenzidine	U	J		12.5	"	"	"	"	"
Chrysene	64.5	J		12.5	"	"	"	"	"

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BIP-2 (1112001-02) Water Sampled: Sep-13-11 09:21 Received: Dec-06-11 12:37

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
Bis(2-ethylhexyl)phthalate	**87.4**	J		62.5	ug/L	1	B112021	Dec-13-11	Dec-22-11
Di-n-octylphthalate	**U**	J		12.5	"	"	"	"	"
Benzo(b)fluoranthene	**86.2**	J		12.5	"	"	"	"	"
Benzo(k)fluoranthene	**34.5**	J		12.5	"	"	"	"	"
Benzo(a)pyrene	**36.9**	J		12.5	"	"	"	"	"
3-Methylcholanthrene	**U**	J		12.5	"	"	"	"	"
Indeno(1,2,3-cd)pyrene	**38.5**	J		12.5	"	"	"	"	"
Dibenz(a,h)anthracene	**12.8**	J		12.5	"	"	"	"	"
Benzo(g,h,i)perylene	**47.0**	J		12.5	"	"	"	"	"
Surrogate: 2-Fluorophenol	113	J		*36.1 %*	*30.6-99.6*	"	"	"	
Surrogate: Phenol-d5	174	J		*55.7 %*	*34.2-102*	"	"	"	
Surrogate: Nitrobenzene-d5	209	J		*66.9 %*	*39.5-99.5*	"	"	"	
Surrogate: 2-Fluorobiphenyl	182	J		*58.4 %*	*33.6-102*	"	"	"	
Surrogate: 2,4,6-Tribromophenol	151	J		*48.4 %*	*65.7-126*	"	"	"	
Surrogate: Terphenyl-d14	259	J		*82.8 %*	*60.7-121*	"	"	"	

BIP-3 (1112001-03) Water Sampled: Sep-13-11 09:29 Received: Dec-06-11 12:37

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
N-Nitrosodimethylamine	**U**	J		6.06	ug/L	1	B112021	Dec-13-11	Dec-22-11
Pyridine	**U**	J		6.06	"	"	"	"	"
2-Picoline	**U**	J		6.06	"	"	"	"	"
N-Nitrosomethylethylamine	**U**	J		6.06	"	"	"	"	"
N-Nitrosodiethylamine	**U**	J		6.06	"	"	"	"	"

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77 West Jackson Boulevard	Project Number: [none]	**Reported:**
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US EPA Region 5 Chicago Regional Laboratory

BIP-3 (1112001-03) Water Sampled: Sep-13-11 09:29 Received: Dec-06-11 12:37

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
Ethyl methanesulfonate	U	J		6.06	ug/L	1	B112021	Dec-13-11	Dec-22-11
Aniline	U	J		6.06	"	"	"	"	"
Phenol	U	J		6.06	"	"	"	"	"
Pentachloroethane	U	J		30.3	"	"	"	"	"
Bis(2-chloroethyl)ether	U	J		6.06	"	"	"	"	"
2-Chlorophenol	U	J		6.06	"	"	"	"	"
1,3-Dichlorobenzene	U	J		6.06	"	"	"	"	"
1,4-Dichlorobenzene	U	J		6.06	"	"	"	"	"
1,2-Dichlorobenzene	U	J		6.06	"	"	"	"	"
2-Methylphenol	U	J		6.06	"	"	"	"	"
Bis(2-chloroisopropyl)ether	U	J		6.06	"	"	"	"	"
N-Nitrosopyrrolidine	U	J		6.06	"	"	"	"	"
Acetophenone	U	J		6.06	"	"	"	"	"
N-Nitroso-di-n-propylamine	U	J		6.06	"	"	"	"	"
o-Toluidine	U	J		6.06	"	"	"	"	"
3-&/or 4-Methylphenol	U	J		60.6	"	"	"	"	"

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BIP-3 (1112001-03) Water Sampled: Sep-13-11 09:29 Received: Dec-06-11 12:37

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
Hexachloroethane	U	J		6.06	ug/L	1	B112021	Dec-13-11	Dec-22-11
Nitrobenzene	U	J		6.06	"	"	"	"	"
N-Nitrosopiperidine	U	J		6.06	"	"	"	"	"
Isophorone	U	J		6.06	"	"	"	"	"
2-Nitrophenol	U	J		6.06	"	"	"	"	"
2,4-Dimethylphenol	U	J		6.06	"	"	"	"	"
Bis(2-chloroethoxy)methane	U	J		6.06	"	"	"	"	"
2,4-Dichlorophenol	U	J		6.06	"	"	"	"	"
1,2,4-Trichlorobenzene	U	J		6.06	"	"	"	"	"
Naphthalene	U	J		6.06	"	"	"	"	"
2,6-Dichlorophenol	U	J		6.06	"	"	"	"	"
4-Chloroaniline	U	J		6.06	"	"	"	"	"
Hexachloropropene	U	J		6.06	"	"	"	"	"
Hexachlorobutadiene	U	J		6.06	"	"	"	"	"
N-Nitrosodi-n-butylamine	U	J		6.06	"	"	"	"	"
4-Chloro-3-methylphenol	U	J		6.06	"	"	"	"	"

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Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
Safrole	U	J		6.06	ug/L	1	B112021	Dec-13-11	Dec-22-11
2-Methylnaphthalene	U	J		6.06	"	"	"	"	"
Hexachlorocyclopentadiene	Rejected			30.3	"	"	"	"	"
1,2,4,5-Tetrachlorobenzene	U	J		6.06	"	"	"	"	"
2,4,6-Trichlorophenol	U	J		6.06	"	"	"	"	"
2,4,5-Trichlorophenol	U	J		6.06	"	"	"	"	"
Isosafrole	U	J		6.06	"	"	"	"	"
2-Chloronaphthalene	U	J		6.06	"	"	"	"	"
2-Nitroaniline	U	J		6.06	"	"	"	"	"
Dimethylphthalate	U	J		6.06	"	"	"	"	"
1,3-Dinitrobenzene	U	J		6.06	"	"	"	"	"
2,6-Dinitrotoluene	U	J		6.06	"	"	"	"	"
Acenaphthylene	U	J		6.06	"	"	"	"	"
3-Nitroaniline	U	J		30.3	"	"	"	"	"
Acenaphthene	U	J		6.06	"	"	"	"	"
2,4-Dinitrophenol	U	J		6.06	"	"	"	"	"

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Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
Pentachlorobenzene	U	J		6.06	ug/L	1	B112021	Dec-13-11	Dec-22-11
4-Nitrophenol	U	J		30.3	"	"	"	"	"
Dibenzofuran	U	J		6.06	"	"	"	"	"
2,4-Dinitrotoluene	U	J		6.06	"	"	"	"	"
2,3,4,6-Tetrachlorophenol	U	J		6.06	"	"	"	"	"
Diethylphthalate	10.7	J		6.06	"	"	"	"	"
Fluorene	U	J		6.06	"	"	"	"	"
4-Chlorophenylphenyl ether	U	J		6.06	"	"	"	"	"
5-Nitro-o-toluidine	U	J		6.06	"	"	"	"	"
4-Nitroaniline	U	J		6.06	"	"	"	"	"
4,6-Dinitro-2-methylphenol	U	J		30.3	"	"	"	"	"
Diphenylamine	U	J		6.06	"	"	"	"	"
Azobenzene	U	J		6.06	"	"	"	"	"
1,3,5-Trinitrobenzene	U	J		6.06	"	"	"	"	"
Diallate (cis or trans)	U	J		6.06	"	"	"	"	"
Phenacetin	U	J		6.06	"	"	"	"	"
4-Bromophenyl phenyl ether	U	J		6.06	"	"	"	"	"

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Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
Hexachlorobenzene	U	J		6.06	ug/L	1	B112021	Dec-13-11	Dec-22-11
Pentachlorophenol	U	J		30.3	"	"	"	"	"
Pentachloronitrobenzene	U	J		6.06	"	"	"	"	"
Pronamide	U	J		6.06	"	"	"	"	"
Phenanthrene	U	J		6.06	"	"	"	"	"
Dinoseb	U	J		30.3	"	"	"	"	"
Anthracene	U	J		6.06	"	"	"	"	"
Carbazole	U	J		6.06	"	"	"	"	"
Di-n-butylphthalate	U	J		6.06	"	"	"	"	"
Isodrin	U	J		6.06	"	"	"	"	"
Fluoranthene	U	J		6.06	"	"	"	"	"
Benzidine	U	J		6.06	"	"	"	"	"
Pyrene	U	J		6.06	"	"	"	"	"
p-Dimethylaminoazobenzene	U	J		6.06	"	"	"	"	"
Chlorobenzilate	U	J		6.06	"	"	"	"	"
3,3'-Dimethylbenzidine	U	J		30.3	"	"	"	"	"

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RCRA, LCD, US EPA Region 5	Project: Blue Island Phenols	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Mike Beedle	Jan-04-12 13:02

Semivolatiles by GC/MS, EPA 8270C (modified)
US EPA Region 5 Chicago Regional Laboratory

BIP-3 (1112001-03) Water Sampled: Sep-13-11 09:29 Received: Dec-06-11 12:37

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
Butylbenzylphthalate	U	J		30.3	ug/L	1	B112021	Dec-13-11	Dec-22-11
2-Acetylaminofluorene	U	J		6.06	"	"	"	"	"
Benzo (a) anthracene	U	J		6.06	"	"	"	"	"
3,3'-Dichlorobenzidine	U	J		6.06	"	"	"	"	"
Chrysene	U	J		6.06	"	"	"	"	"
Bis(2-ethylhexyl)phthalate	437	J		30.3	"	"	"	"	"
Di-n-octylphthalate	U	J		6.06	"	"	"	"	"
Benzo(b)fluoranthene	U	J		6.06	"	"	"	"	"
Benzo(k)fluoranthene	U	J		6.06	"	"	"	"	"
Benzo(a)pyrene	U	J		6.06	"	"	"	"	"
3-Methylcholanthrene	U	J		6.06	"	"	"	"	"
Indeno(1,2,3-cd)pyrene	U	J		6.06	"	"	"	"	"
Dibenz(a,h)anthracene	U	J		6.06	"	"	"	"	"
Benzo(g,h,i)perylene	U	J		6.06	"	"	"	"	"

Surrogate: 2-Fluorophenol	88.8	J	*58.6 %*	*30.6-99.6*	"	"	"
Surrogate: Phenol-d5	106	J	*69.8 %*	*34.2-102*	"	"	"
Surrogate: Nitrobenzene-d5	117	J	*77.3 %*	*39.5-99.5*	"	"	"
Surrogate: 2-Fluorobiphenyl	90.5	J	*59.8 %*	*33.6-102*	"	"	"

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BIP-3 (1112001-03) Water Sampled: Sep-13-11 09:29 Received: Dec-06-11 12:37

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
Surrogate: 2,4,6-Tribromophenol	103	J		*68.2 %*		*65.7-126*	*B112021*	*Dec-13-11*	*Dec-22-11*
Surrogate: Terphenyl-d14	133	J		*87.9 %*		*60.7-121*	"	"	"

BIP-4 (1112001-04) Water Sampled: Sep-13-11 10:07 Received: Dec-06-11 12:37

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
N-Nitrosodimethylamine	U	J		4.76	ug/L	1	B112021	Dec-13-11	Dec-22-11
Pyridine	U	J		4.76	"	"	"	"	"
2-Picoline	U	J		4.76	"	"	"	"	"
N-Nitrosomethylethylamine	U	J		4.76	"	"	"	"	"
N-Nitrosodiethylamine	U	J		4.76	"	"	"	"	"
Ethyl methanesulfonate	U	J		4.76	"	"	"	"	"
Aniline	U	J		4.76	"	"	"	"	"
Phenol	17600	J		238	"	50	"	"	Dec-22-11
Pentachloroethane	U	J		23.8	"	1	"	"	Dec-22-11
Bis(2-chloroethyl)ether	U	J		4.76	"	"	"	"	"
2-Chlorophenol	U	J		4.76	"	"	"	"	"
1,3-Dichlorobenzene	U	J		4.76	"	"	"	"	"
1,4-Dichlorobenzene	U	J		4.76	"	"	"	"	"
1,2-Dichlorobenzene	U	J		4.76	"	"	"	"	"

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BIP-4 (1112001-04) Water Sampled: Sep-13-11 10:07 Received: Dec-06-11 12:37

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
2-Methylphenol	U	J		4.76	ug/L	1	B112021	Dec-13-11	Dec-22-11
Bis(2-chloroisopropyl)ether	U	J		4.76	"	"	"	"	"
N-Nitrosopyrrolidine	U	J		4.76	"	"	"	"	"
Acetophenone	160	J		4.76	"	"	"	"	"
N-Nitroso-di-n-propylamine	U	J		4.76	"	"	"	"	"
o-Toluidine	U	J		4.76	"	"	"	"	"
3-&/or 4-Methylphenol	U	J		47.6	"	"	"	"	"
Hexachloroethane	U	J		4.76	"	"	"	"	"
Nitrobenzene	U	J		4.76	"	"	"	"	"
N-Nitrosopiperidine	U	J		4.76	"	"	"	"	"
Isophorone	U	J		4.76	"	"	"	"	"
2-Nitrophenol	U	J		4.76	"	"	"	"	"
2,4-Dimethylphenol	U	J		4.76	"	"	"	"	"
Bis(2-chloroethoxy)methane	U	J		4.76	"	"	"	"	"
2,4-Dichlorophenol	U	J		4.76	"	"	"	"	"
1,2,4-Trichlorobenzene	U	J		4.76	"	"	"	"	"
Naphthalene	U	J		4.76	"	"	"	"	"

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BIP-4 (1112001-04) Water Sampled: Sep-13-11 10:07 Received: Dec-06-11 12:37

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
2,6-Dichlorophenol	U	J		4.76	ug/L	1	B112021	Dec-13-11	Dec-22-11
4-Chloroaniline	U	J		4.76	"	"	"	"	"
Hexachloropropene	U	J		4.76	"	"	"	"	"
Hexachlorobutadiene	U	J		4.76	"	"	"	"	"
N-Nitrosodi-n-butylamine	U	J		4.76	"	"	"	"	"
4-Chloro-3-methylphenol	U	J		4.76	"	"	"	"	"
Safrole	U	J		4.76	"	"	"	"	"
2-Methylnaphthalene	U	J		4.76	"	"	"	"	"
Hexachlorocyclopentadiene	Rejected			23.8	"	"	"	"	"
1,2,4,5-Tetrachlorobenzene	U	J		4.76	"	"	"	"	"
2,4,6-Trichlorophenol	U	J		4.76	"	"	"	"	"
2,4,5-Trichlorophenol	U	J		4.76	"	"	"	"	"
Isosafrole	U	J		4.76	"	"	"	"	"
2-Chloronaphthalene	U	J		4.76	"	"	"	"	"
2-Nitroaniline	U	J		4.76	"	"	"	"	"
Dimethylphthalate	U	J		4.76	"	"	"	"	"

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BIP-4 (1112001-04) Water Sampled: Sep-13-11 10:07 Received: Dec-06-11 12:37

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
1,3-Dinitrobenzene	U	J		4.76	ug/L	1	B112021	Dec-13-11	Dec-22-11
2,6-Dinitrotoluene	U	J		4.76	"	"	"	"	"
Acenaphthylene	U	J		4.76	"	"	"	"	"
3-Nitroaniline	U	J		23.8	"	"	"	"	"
Acenaphthene	U	J		4.76	"	"	"	"	"
2,4-Dinitrophenol	U	J		4.76	"	"	"	"	"
Pentachlorobenzene	U	J		4.76	"	"	"	"	"
4-Nitrophenol	U	J		23.8	"	"	"	"	"
Dibenzofuran	U	J		4.76	"	"	"	"	"
2,4-Dinitrotoluene	U	J		4.76	"	"	"	"	"
2,3,4,6-Tetrachlorophenol	U	J		4.76	"	"	"	"	"
Diethylphthalate	U	J		4.76	"	"	"	"	"
Fluorene	U	J		4.76	"	"	"	"	"
4-Chlorophenylphenyl ether	U	J		4.76	"	"	"	"	"
5-Nitro-o-toluidine	U	J		4.76	"	"	"	"	"
4-Nitroaniline	U	J		4.76	"	"	"	"	"

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Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
4,6-Dinitro-2-methylphenol	U	J		23.8	ug/L	1	B112021	Dec-13-11	Dec-22-11
Diphenylamine	U	J		4.76	"	"	"	"	"
Azobenzene	U	J		4.76	"	"	"	"	"
1,3,5-Trinitrobenzene	U	J		4.76	"	"	"	"	"
Diallate (cis or trans)	U	J		4.76	"	"	"	"	"
Phenacetin	U	J		4.76	"	"	"	"	"
4-Bromophenyl phenyl ether	U	J		4.76	"	"	"	"	"
Hexachlorobenzene	U	J		4.76	"	"	"	"	"
Pentachlorophenol	U	J		23.8	"	"	"	"	"
Pentachloronitrobenzene	U	J		4.76	"	"	"	"	"
Pronamide	U	J		4.76	"	"	"	"	"
Phenanthrene	U	J		4.76	"	"	"	"	"
Dinoseb	U	J		23.8	"	"	"	"	"
Anthracene	U	J		4.76	"	"	"	"	"
Carbazole	U	J		4.76	"	"	"	"	"
Di-n-butylphthalate	U	J		4.76	"	"	"	"	"

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Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
Isodrin	U	J		4.76	ug/L	1	B112021	Dec-13-11	Dec-22-11
Fluoranthene	U	J		4.76	"	"	"	"	"
Benzidine	U	J		4.76	"	"	"	"	"
Pyrene	U	J		4.76	"	"	"	"	"
p-Dimethylaminoazobenzene	U	J		4.76	"	"	"	"	"
Chlorobenzilate	U	J		4.76	"	"	"	"	"
3,3'-Dimethylbenzidine	U	J		23.8	"	"	"	"	"
Butylbenzylphthalate	U	J		23.8	"	"	"	"	"
2-Acetylaminofluorene	U	J		4.76	"	"	"	"	"
Benzo (a) anthracene	U	J		4.76	"	"	"	"	"
3,3'-Dichlorobenzidine	U	J		4.76	"	"	"	"	"
Chrysene	U	J		4.76	"	"	"	"	"
Bis(2-ethylhexyl)phthalate	U	J		23.8	"	"	"	"	"
Di-n-octylphthalate	U	J		4.76	"	"	"	"	"
Benzo(b)fluoranthene	U	J		4.76	"	"	"	"	"
Benzo(k)fluoranthene	U	J		4.76	"	"	"	"	"

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Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
Benzo(a)pyrene	U	J		4.76	ug/L	1	B112021	Dec-13-11	Dec-22-11
3-Methylcholanthrene	U	J		4.76	"	"	"	"	"
Indeno(1,2,3-cd)pyrene	U	J		4.76	"	"	"	"	"
Dibenz(a,h)anthracene	U	J		4.76	"	"	"	"	"
Benzo(g,h,i)perylene	U	J		4.76	"	"	"	"	"
Surrogate: 2-Fluorophenol	87.5	J		*73.5 %*	*30.6-99.6*		"	"	"
Surrogate: Phenol-d5	90.6	J		*76.1 %*	*34.2-102*		"	"	"
Surrogate: Nitrobenzene-d5	91.4	J		*76.8 %*	*39.5-99.5*		"	"	"
Surrogate: 2-Fluorobiphenyl	88.6	J		*74.4 %*	*33.6-102*		"	"	"
Surrogate: 2,4,6-Tribromophenol	135	J		*113 %*	*65.7-126*		"	"	"
Surrogate: Terphenyl-d14	92.9	J		*78.0 %*	*60.7-121*		"	"	"

BIP-5 (1112001-05) Water Sampled: Sep-13-11 10:18 Received: Dec-06-11 12:37

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
N-Nitrosodimethylamine	U	J		3.85	ug/L	1	B112021	Dec-13-11	Dec-22-11
Pyridine	U	J		3.85	"	"	"	"	"
2-Picoline	U	J		3.85	"	"	"	"	"
N-Nitrosomethylethylamine	U	J		3.85	"	"	"	"	"
N-Nitrosodiethylamine	U	J		3.85	"	"	"	"	"

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BIP-5 (1112001-05) Water Sampled: Sep-13-11 10:18 Received: Dec-06-11 12:37

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
Ethyl methanesulfonate	U	J		3.85	ug/L	1	B112021	Dec-13-11	Dec-22-11
Aniline	U	J		3.85	"	"	"	"	"
Phenol	27600	J		385	"	100	"	"	Dec-29-11
Pentachloroethane	U	J		19.2	"	1	"	"	Dec-22-11
Bis(2-chloroethyl)ether	U	J		3.85	"	"	"	"	"
2-Chlorophenol	U	J		3.85	"	"	"	"	"
1,3-Dichlorobenzene	U	J		3.85	"	"	"	"	"
1,4-Dichlorobenzene	U	J		3.85	"	"	"	"	"
1,2-Dichlorobenzene	U	J		3.85	"	"	"	"	"
2-Methylphenol	U	J		3.85	"	"	"	"	"
Bis(2-chloroisopropyl)ether	U	J		3.85	"	"	"	"	"
N-Nitrosopyrrolidine	U	J		3.85	"	"	"	"	"
Acetophenone	186	J		3.85	"	"	"	"	"
N-Nitroso-di-n-propylamine	U	J		3.85	"	"	"	"	"
o-Toluidine	U	J		3.85	"	"	"	"	"
3-&/or 4-Methylphenol	U	J		38.5	"	"	"	"	"
Hexachloroethane	U	J		3.85	"	"	"	"	"

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Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
Nitrobenzene	U	J		3.85	ug/L	1	B112021	Dec-13-11	Dec-22-11
N-Nitrosopiperidine	U	J		3.85	"	"	"	"	"
Isophorone	U	J		3.85	"	"	"	"	"
2-Nitrophenol	U	J		3.85	"	"	"	"	"
2,4-Dimethylphenol	U	J		3.85	"	"	"	"	"
Bis(2-chloroethoxy)methane	U	J		3.85	"	"	"	"	"
2,4-Dichlorophenol	U	J		3.85	"	"	"	"	"
1,2,4-Trichlorobenzene	U	J		3.85	"	"	"	"	"
Naphthalene	U	J		3.85	"	"	"	"	"
2,6-Dichlorophenol	U	J		3.85	"	"	"	"	"
4-Chloroaniline	U	J		3.85	"	"	"	"	"
Hexachloropropene	U	J		3.85	"	"	"	"	"
Hexachlorobutadiene	U	J		3.85	"	"	"	"	"
N-Nitrosodi-n-butylamine	U	J		3.85	"	"	"	"	"
4-Chloro-3-methylphenol	U	J		3.85	"	"	"	"	"
Safrole	U	J		3.85	"	"	"	"	"

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Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
2-Methylnaphthalene	U	J		3.85	ug/L	1	B112021	Dec-13-11	Dec-22-11
Hexachlorocyclopentadiene	Rejected			19.2	"	"	"	"	"
1,2,4,5-Tetrachlorobenzene	U	J		3.85	"	"	"	"	"
2,4,6-Trichlorophenol	U	J		3.85	"	"	"	"	"
2,4,5-Trichlorophenol	U	J		3.85	"	"	"	"	"
Isosafrole	U	J		3.85	"	"	"	"	"
2-Chloronaphthalene	U	J		3.85	"	"	"	"	"
2-Nitroaniline	U	J		3.85	"	"	"	"	"
Dimethylphthalate	U	J		3.85	"	"	"	"	"
1,3-Dinitrobenzene	U	J		3.85	"	"	"	"	"
2,6-Dinitrotoluene	U	J		3.85	"	"	"	"	"
Acenaphthylene	U	J		3.85	"	"	"	"	"
3-Nitroaniline	U	J		19.2	"	"	"	"	"
Acenaphthene	U	J		3.85	"	"	"	"	"
2,4-Dinitrophenol	U	J		3.85	"	"	"	"	"
Pentachlorobenzene	U	J		3.85	"	"	"	"	"

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Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
4-Nitrophenol	U	J		19.2	ug/L	1	B112021	Dec-13-11	Dec-22-11
Dibenzofuran	U	J		3.85	"	"	"	"	"
2,4-Dinitrotoluene	U	J		3.85	"	"	"	"	"
2,3,4,6-Tetrachlorophenol	U	J		3.85	"	"	"	"	"
Diethylphthalate	U	J		3.85	"	"	"	"	"
Fluorene	U	J		3.85	"	"	"	"	"
4-Chlorophenylphenyl ether	U	J		3.85	"	"	"	"	"
5-Nitro-o-toluidine	U	J		3.85	"	"	"	"	"
4-Nitroaniline	U	J		3.85	"	"	"	"	"
4,6-Dinitro-2-methylphenol	U	J		19.2	"	"	"	"	"
Diphenylamine	U	J		3.85	"	"	"	"	"
Azobenzene	U	J		3.85	"	"	"	"	"
1,3,5-Trinitrobenzene	U	J		3.85	"	"	"	"	"
Diallate (cis or trans)	U	J		3.85	"	"	"	"	"
Phenacetin	U	J		3.85	"	"	"	"	"
4-Bromophenyl phenyl ether	U	J		3.85	"	"	"	"	"

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RCRA, LCD, US EPA Region 5	Project: Blue Island Phenols	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Mike Beedle	Jan-04-12 13:02

Semivolatiles by GC/MS, EPA 8270C (modified)
US EPA Region 5 Chicago Regional Laboratory

BIP-5 (1112001-05) Water Sampled: Sep-13-11 10:18 Received: Dec-06-11 12:37

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
Hexachlorobenzene	U	J		3.85	ug/L	1	B112021	Dec-13-11	Dec-22-11
Pentachlorophenol	U	J		19.2	"	"	"	"	"
Pentachloronitrobenzene	U	J		3.85	"	"	"	"	"
Pronamide	U	J		3.85	"	"	"	"	"
Phenanthrene	U	J		3.85	"	"	"	"	"
Dinoseb	U	J		19.2	"	"	"	"	"
Anthracene	U	J		3.85	"	"	"	"	"
Carbazole	U	J		3.85	"	"	"	"	"
Di-n-butylphthalate	U	J		3.85	"	"	"	"	"
Isodrin	U	J		3.85	"	"	"	"	"
Fluoranthene	U	J		3.85	"	"	"	"	"
Benzidine	U	J		3.85	"	"	"	"	"
Pyrene	U	J		3.85	"	"	"	"	"
p-Dimethylaminoazobenzene	U	J		3.85	"	"	"	"	"
Chlorobenzilate	U	J		3.85	"	"	"	"	"
3,3'-Dimethylbenzidine	U	J		19.2	"	"	"	"	"

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RCRA, LCD, US EPA Region 5	Project: Blue Island Phenols	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Mike Beedle	Jan-04-12 13:02

Semivolatiles by GC/MS, EPA 8270C (modified)
US EPA Region 5 Chicago Regional Laboratory

BIP-5 (1112001-05) Water Sampled: Sep-13-11 10:18 Received: Dec-06-11 12:37

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
Butylbenzylphthalate	U	J		19.2	ug/L	1	B112021	Dec-13-11	Dec-22-11
2-Acetylaminofluorene	U	J		3.85	"	"	"	"	"
Benzo (a) anthracene	U	J		3.85	"	"	"	"	"
3,3'-Dichlorobenzidine	U	J		3.85	"	"	"	"	"
Chrysene	U	J		3.85	"	"	"	"	"
Bis(2-ethylhexyl)phthalate	U	J		19.2	"	"	"	"	"
Di-n-octylphthalate	U	J		3.85	"	"	"	"	"
Benzo(b)fluoranthene	U	J		3.85	"	"	"	"	"
Benzo(k)fluoranthene	U	J		3.85	"	"	"	"	"
Benzo(a)pyrene	U	J		3.85	"	"	"	"	"
3-Methylcholanthrene	U	J		3.85	"	"	"	"	"
Indeno(1,2,3-cd)pyrene	U	J		3.85	"	"	"	"	"
Dibenz(a,h)anthracene	U	J		3.85	"	"	"	"	"
Benzo(g,h,i)perylene	U	J		3.85	"	"	"	"	"
Surrogate: 2-Fluorophenol	77.3	J		*80.4 %*	*30.6-99.6*	"	"	"	
Surrogate: Phenol-d5	79.3	J		*82.4 %*	*34.2-102*	"	"	"	
Surrogate: Nitrobenzene-d5	76.1	J		*79.2 %*	*39.5-99.5*	"	"	"	

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RCRA, LCD, US EPA Region 5	Project: Blue Island Phenols	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Mike Beedle	Jan-04-12 13:02

Semivolatiles by GC/MS, EPA 8270C (modified)
US EPA Region 5 Chicago Regional Laboratory

BIP-5 (1112001-05) Water Sampled: Sep-13-11 10:18 Received: Dec-06-11 12:37

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
Surrogate: 2-Fluorobiphenyl	73.6	J		*76.6 %*	*33.6-102*		*B112021*	*Dec-13-11*	*Dec-22-11*
Surrogate: 2,4,6-Tribromophenol	108	J		*113 %*	*65.7-126*		"	"	"
Surrogate: Terphenyl-d14	76.3	J		*79.4 %*	*60.7-121*		"	"	"

BIP-7, 9008-07 oil phase (1112001-08) Soil Sampled: Sep-13-11 11:17 Received: Dec-06-11 12:37

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
N-Nitrosodimethylamine	U			8.75E5	ug/L	1	B112021	Sep-23-11	Oct-31-11
Pyridine	U			8.75E5	"	"	"	"	"
2-Picoline	U			8.75E5	"	"	"	"	"
N-Nitrosomethylethylamine	U			8.75E5	"	"	"	"	"
N-Nitrosodiethylamine	U			8.75E5	"	"	"	"	"
Ethyl methanesulfonate	U			8.75E5	"	"	"	"	"
Aniline	U			8.75E5	"	"	"	"	"
Phenol	U			8.75E5	"	"	"	"	"
Pentachloroethane	U			4.38E6	"	"	"	"	"
Bis(2-chloroethyl)ether	U			8.75E5	"	"	"	"	"
2-Chlorophenol	U			8.75E5	"	"	"	"	"
1,3-Dichlorobenzene	U			8.75E5	"	"	"	"	"
1,4-Dichlorobenzene	U			8.75E5	"	"	"	"	"

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RCRA, LCD, US EPA Region 5	Project: Blue Island Phenols	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Mike Beedle	Jan-04-12 13:02

Semivolatiles by GC/MS, EPA 8270C (modified)
US EPA Region 5 Chicago Regional Laboratory

BIP-7, 9008-07 oil phase (1112001-08) Soil Sampled: Sep-13-11 11:17 Received: Dec-06-11 12:37

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
1,2-Dichlorobenzene	U			8.75E5	ug/L	1	B112021	Sep-23-11	Oct-31-11
2-Methylphenol	U			8.75E5	"	"	"	"	"
Bis(2-chloroisopropyl)ether	U			8.75E5	"	"	"	"	"
N-Nitrosopyrrolidine	U			8.75E5	"	"	"	"	"
Acetophenone	9.57E6			8.75E5	"	"	"	"	"
N-Nitroso-di-n-propylamine	U			8.75E5	"	"	"	"	"
o-Toluidine	U			8.75E5	"	"	"	"	"
3-&/or 4-Methylphenol	U			8.75E6	"	"	"	"	"
Hexachloroethane	U			8.75E5	"	"	"	"	"
Nitrobenzene	U			8.75E5	"	"	"	"	"
N-Nitrosopiperidine	U			8.75E5	"	"	"	"	"
Isophorone	U			8.75E5	"	"	"	"	"
2-Nitrophenol	U			8.75E5	"	"	"	"	"
2,4-Dimethylphenol	U			8.75E5	"	"	"	"	"
Bis(2-chloroethoxy)methane	U			8.75E5	"	"	"	"	"
2,4-Dichlorophenol	U			8.75E5	"	"	"	"	"
1,2,4-Trichlorobenzene	U			8.75E5	"	"	"	"	"

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Semivolatiles by GC/MS, EPA 8270C (modified)
US EPA Region 5 Chicago Regional Laboratory

BIP-7, 9008-07 oil phase (1112001-08) Soil Sampled: Sep-13-11 11:17 Received: Dec-06-11 12:37

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
Naphthalene	U			8.75E5	ug/L	1	B112021	Sep-23-11	Oct-31-11
2,6-Dichlorophenol	U			8.75E5	"	"	"	"	"
Hexachloropropene	U			8.75E5	"	"	"	"	"
Hexachlorobutadiene	U			8.75E5	"	"	"	"	"
N-Nitrosodi-n-butylamine	U			8.75E5	"	"	"	"	"
4-Chloro-3-methylphenol	U			8.75E5	"	"	"	"	"
Safrole	U			8.75E5	"	"	"	"	"
2-Methylnaphthalene	U			8.75E5	"	"	"	"	"
Hexachlorocyclopentadiene	U			4.38E6	"	"	"	"	"
1,2,4,5-Tetrachlorobenzene	U			8.75E5	"	"	"	"	"
2,4,6-Trichlorophenol	U			8.75E5	"	"	"	"	"
2,4,5-Trichlorophenol	U			8.75E5	"	"	"	"	"
Isosafrole	U			8.75E5	"	"	"	"	"
2-Chloronaphthalene	U			8.75E5	"	"	"	"	"
2-Nitroaniline	U			8.75E5	"	"	"	"	"
Dimethylphthalate	U			8.75E5	"	"	"	"	"

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RCRA, LCD, US EPA Region 5	Project: Blue Island Phenols	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Mike Beedle	Jan-04-12 13:02

Semivolatiles by GC/MS, EPA 8270C (modified)
US EPA Region 5 Chicago Regional Laboratory

BIP-7, 9008-07 oil phase (1112001-08) Soil Sampled: Sep-13-11 11:17 Received: Dec-06-11 12:37

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
1,3-Dinitrobenzene	U			8.75E5	ug/L	1	B112021	Sep-23-11	Oct-31-11
2,6-Dinitrotoluene	U			8.75E5	"	"	"	"	"
Acenaphthylene	U			8.75E5	"	"	"	"	"
3-Nitroaniline	U			4.38E6	"	"	"	"	"
Acenaphthene	U			8.75E5	"	"	"	"	"
2,4-Dinitrophenol	U			8.75E5	"	"	"	"	"
Pentachlorobenzene	U			8.75E5	"	"	"	"	"
4-Nitrophenol	U			4.38E6	"	"	"	"	"
Dibenzofuran	U			8.75E5	"	"	"	"	"
2,4-Dinitrotoluene	U			8.75E5	"	"	"	"	"
2,3,4,6-Tetrachlorophenol	U			8.75E5	"	"	"	"	"
Diethylphthalate	U			8.75E5	"	"	"	"	"
Fluorene	U			8.75E5	"	"	"	"	"
4-Chlorophenylphenyl ether	U			8.75E5	"	"	"	"	"
5-Nitro-o-toluidine	U			8.75E5	"	"	"	"	"
4-Nitroaniline	U			8.75E5	"	"	"	"	"

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RCRA, LCD, US EPA Region 5	Project: Blue Island Phenols	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Mike Beedle	Jan-04-12 13:02

Semivolatiles by GC/MS, EPA 8270C (modified)
US EPA Region 5 Chicago Regional Laboratory

BIP-7, 9008-07 oil phase (1112001-08) Soil Sampled: Sep-13-11 11:17 Received: Dec-06-11 12:37

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
4,6-Dinitro-2-methylphenol	U			4.38E6	ug/L	1	B112021	Sep-23-11	Oct-31-11
Diphenylamine	U			8.75E5	"	"	"	"	"
Azobenzene	U			8.75E5	"	"	"	"	"
Diallate (cis or trans)	U			8.75E5	"	"	"	"	"
Phenacetin	U			8.75E5	"	"	"	"	"
4-Bromophenyl phenyl ether	U			8.75E5	"	"	"	"	"
Hexachlorobenzene	U			8.75E5	"	"	"	"	"
Pentachlorophenol	U	J		4.38E6	"	"	"	"	"
Pentachloronitrobenzene	U			8.75E5	"	"	"	"	"
Pronamide	U			8.75E5	"	"	"	"	"
Phenanthrene	U			8.75E5	"	"	"	"	"
Dinoseb	U			4.38E6	"	"	"	"	"
Anthracene	U			8.75E5	"	"	"	"	"
Carbazole	U			8.75E5	"	"	"	"	"
Di-n-butylphthalate	U			8.75E5	"	"	"	"	"
Isodrin	U			8.75E5	"	"	"	"	"

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RCRA, LCD, US EPA Region 5	Project: Blue Island Phenols	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Mike Beedle	Jan-04-12 13:02

Semivolatiles by GC/MS, EPA 8270C (modified)
US EPA Region 5 Chicago Regional Laboratory

BIP-7, 9008-07 oil phase (1112001-08) Soil Sampled: Sep-13-11 11:17 Received: Dec-06-11 12:37

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
Fluoranthene	U			8.75E5	ug/L	1	B112021	Sep-23-11	Oct-31-11
Benzidine	U	J		8.75E5	"	"	"	"	"
Pyrene	U			8.75E5	"	"	"	"	"
p-Dimethylaminoazobenzene	U			8.75E5	"	"	"	"	"
Chlorobenzilate	U			8.75E5	"	"	"	"	"
3,3'-Dimethylbenzidine	U			4.38E6	"	"	"	"	"
Butylbenzylphthalate	U			4.38E6	"	"	"	"	"
2-Acetylaminofluorene	U			8.75E5	"	"	"	"	"
Benzo (a) anthracene	U			8.75E5	"	"	"	"	"
3,3'-Dichlorobenzidine	U			8.75E5	"	"	"	"	"
Chrysene	U			8.75E5	"	"	"	"	"
Bis(2-ethylhexyl)phthalate	U			4.38E6	"	"	"	"	"
Di-n-octylphthalate	U			8.75E5	"	"	"	"	"
Benzo(b)fluoranthene	U			8.75E5	"	"	"	"	"
Benzo(k)fluoranthene	U			8.75E5	"	"	"	"	"
Benzo(a)pyrene	U			8.75E5	"	"	"	"	"

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RCRA, LCD, US EPA Region 5	Project: Blue Island Phenols	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Mike Beedle	Jan-04-12 13:02

Semivolatiles by GC/MS, EPA 8270C (modified)
US EPA Region 5 Chicago Regional Laboratory

BIP-7, 9008-07 oil phase (1112001-08) Soil Sampled: Sep-13-11 11:17 Received: Dec-06-11 12:37

Analyte	Result	Flags / Qualifiers	MDL	Limit	Units	Dilution	Batch	Prepared	Analyzed
3-Methylcholanthrene	U			8.75E5	ug/L	1	B112021	Sep-23-11	Oct-31-11
Indeno(1,2,3-cd)pyrene	U			8.75E5	"	"	"	"	"
Dibenz(a,h)anthracene	U			8.75E5	"	"	"	"	"
Benzo(g,h,i)perylene	U			8.75E5	"	"	"	"	"
Surrogate: 2-Fluorophenol	0.00				*30.6-99.6*	"	"	"	
Surrogate: Phenol-d5	0.00				*34.2-102*	"	"	"	
Surrogate: Nitrobenzene-d5	0.00				*39.5-99.5*	"	"	"	
Surrogate: 2-Fluorobiphenyl	0.00				*33.6-102*	"	"	"	
Surrogate: 2,4,6-Tribromophenol	0.00				*65.7-126*	"	"	"	
Surrogate: Terphenyl-d14	0.00				*60.7-121*	"	"	"	

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RCRA, LCD, US EPA Region 5	Project: Blue Island Phenols	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Mike Beedle	Jan-04-12 13:02

Semivolatiles by GC/MS, EPA 8270C (modified) - Quality Control
US EPA Region 5 Chicago Regional Laboratory

Batch B112021 - Solvent Extraction

Blank (B112021-BLK1) **Prepared: Dec-13-11 Analyzed: Dec-22-11**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
N-Nitrosodimethylamine	U			1.00	ug/L						
Pyridine	U			1.00	"						
2-Picoline	U			1.00	"						
N-Nitrosomethylethylamine	U			1.00	"						
N-Nitrosodiethylamine	U			1.00	"						
Ethyl methanesulfonate	U			1.00	"						
Aniline	U			1.00	"						
Phenol	U			1.00	"						
Pentachloroethane	U			5.00	"						
Bis(2-chloroethyl)ether	U			1.00	"						
2-Chlorophenol	U			1.00	"						
1,3-Dichlorobenzene	U			1.00	"						
1,4-Dichlorobenzene	U			1.00	"						
1,2-Dichlorobenzene	U			1.00	"						
2-Methylphenol	U			1.00	"						
Bis(2-chloroisopropyl)ether	U			1.00	"						
N-Nitrosopyrrolidine	U			1.00	"						
Acetophenone	U			1.00	"						
N-Nitroso-di-n-propylamine	U			1.00	"						
o-Toluidine	U			1.00	"						
3-&/or 4-Methylphenol	U			10.0	"						
Hexachloroethane	U			1.00	"						
Nitrobenzene	U			1.00	"						
N-Nitrosopiperidine	U			1.00	"						
Isophorone	U			1.00	"						
2-Nitrophenol	U			1.00	"						
2,4-Dimethylphenol	U			1.00	"						
Bis(2-chloroethoxy)methane	U			1.00	"						
2,4-Dichlorophenol	U			1.00	"						
1,2,4-Trichlorobenzene	U			1.00	"						
Naphthalene	U			1.00	"						
2,6-Dichlorophenol	U			1.00	"						
4-Chloroaniline	U			1.00	"						

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RCRA, LCD, US EPA Region 5	Project: Blue Island Phenols	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Mike Beedle	Jan-04-12 13:02

Semivolatiles by GC/MS, EPA 8270C (modified) - Quality Control
US EPA Region 5 Chicago Regional Laboratory

Batch B112021 - Solvent Extraction

Blank (B112021-BLK1) **Prepared: Dec-13-11 Analyzed: Dec-22-11**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Hexachloropropene	U			1.00	ug/L						
Hexachlorobutadiene	U			1.00	"						
N-Nitrosodi-n-butylamine	U			1.00	"						
4-Chloro-3-methylphenol	U			1.00	"						
Safrole	U			1.00	"						
2-Methylnaphthalene	U			1.00	"						
Hexachlorocyclopentadiene	U			5.00	"						
1,2,4,5-Tetrachlorobenzene	U			1.00	"						
2,4,6-Trichlorophenol	U			1.00	"						
2,4,5-Trichlorophenol	U			1.00	"						
Isosafrole	U			1.00	"						
2-Chloronaphthalene	U			1.00	"						
2-Nitroaniline	U			1.00	"						
Dimethylphthalate	U			1.00	"						
1,3-Dinitrobenzene	U			1.00	"						
2,6-Dinitrotoluene	U			1.00	"						
Acenaphthylene	U			1.00	"						
3-Nitroaniline	U			5.00	"						
Acenaphthene	U			1.00	"						
2,4-Dinitrophenol	U			1.00	"						
Pentachlorobenzene	U			1.00	"						
4-Nitrophenol	U			5.00	"						
Dibenzofuran	U			1.00	"						
2,4-Dinitrotoluene	U			1.00	"						
2,3,4,6-Tetrachlorophenol	U			1.00	"						
Diethylphthalate	U			1.00	"						
Fluorene	U			1.00	"						
4-Chlorophenylphenyl ether	U			1.00	"						
5-Nitro-o-toluidine	U			1.00	"						
4-Nitroaniline	U			1.00	"						
4,6-Dinitro-2-methylphenol	U			5.00	"						
Diphenylamine	U			1.00	"						
Azobenzene	U			1.00	"						

Environmental Protection Agency Region 5
Chicago Regional Laboratory
536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

RCRA, LCD, US EPA Region 5	Project: Blue Island Phenols	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Mike Beedle	Jan-04-12 13:02

Semivolatiles by GC/MS, EPA 8270C (modified) - Quality Control
US EPA Region 5 Chicago Regional Laboratory

Batch B112021 - Solvent Extraction

Blank (B112021-BLK1) **Prepared: Dec-13-11 Analyzed: Dec-22-11**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
1,3,5-Trinitrobenzene	U			1.00	ug/L						
Diallate (cis or trans)	U			1.00	"						
Phenacetin	U			1.00	"						
4-Bromophenyl phenyl ether	U			1.00	"						
Hexachlorobenzene	U			1.00	"						
Pentachlorophenol	U			5.00	"						
Pentachloronitrobenzene	U			1.00	"						
Pronamide	U			1.00	"						
Phenanthrene	U			1.00	"						
Dinoseb	U			5.00	"						
Anthracene	U			1.00	"						
Carbazole	U			1.00	"						
Di-n-butylphthalate	U			1.00	"						
Isodrin	U			1.00	"						
Fluoranthene	U			1.00	"						
Benzidine	U			1.00	"						
Pyrene	U			1.00	"						
p-Dimethylaminoazobenzene	U			1.00	"						
Chlorobenzilate	U			1.00	"						
3,3'-Dimethylbenzidine	U			5.00	"						
Butylbenzylphthalate	U			5.00	"						
2-Acetylaminofluorene	U			1.00	"						
Benzo (a) anthracene	U			1.00	"						
3,3'-Dichlorobenzidine	U			1.00	"						
Chrysene	U			1.00	"						
Bis(2-ethylhexyl)phthalate	U			5.00	"						
Di-n-octylphthalate	U			1.00	"						
Benzo(b)fluoranthene	U			1.00	"						
Benzo(k)fluoranthene	U			1.00	"						
Benzo(a)pyrene	U			1.00	"						
3-Methylcholanthrene	U			1.00	"						
Indeno(1,2,3-cd)pyrene	U			1.00	"						
Dibenz(a,h)anthracene	U			1.00	"						

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RCRA, LCD, US EPA Region 5	Project: Blue Island Phenols	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Mike Beedle	Jan-04-12 13:02

Semivolatiles by GC/MS, EPA 8270C (modified) - Quality Control
US EPA Region 5 Chicago Regional Laboratory

Batch B112021 - Solvent Extraction

Blank (B112021-BLK1) **Prepared: Dec-13-11 Analyzed: Dec-22-11**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Benzo(g,h,i)perylene	**U**			1.00	ug/L						
Surrogate: 2-Fluorophenol	*38.9*				"	*50.00*		*77.8*	*30.6-99.6*		
Surrogate: Phenol-d5	*42.3*				"	*50.00*		*84.5*	*34.2-102*		
Surrogate: Nitrobenzene-d5	*39.1*				"	*50.00*		*78.2*	*39.5-99.5*		
Surrogate: 2-Fluorobiphenyl	*32.2*				"	*50.00*		*64.5*	*33.6-102*		
Surrogate: 2,4,6-Tribromophenol	*44.0*				"	*50.00*		*87.9*	*65.7-126*		
Surrogate: Terphenyl-d14	*43.5*				"	*50.00*		*87.0*	*60.7-121*		

LCS (B112021-BS1) **Prepared: Dec-13-11 Analyzed: Dec-22-11**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
N-Nitrosodimethylamine	**18.9**			1.00	ug/L	25.00		75.8	21.6-121		
Pyridine	**15.6**			1.00	"	25.00		62.5	20-122		
2-Picoline	**20.0**			1.00	"	25.00		80.1	20-148		
N-Nitrosomethylethylamine	**21.3**			1.00	"	25.00		85.4	20-121		
N-Nitrosodiethylamine	**19.7**			1.00	"	25.00		78.6	20-152		
Ethyl methanesulfonate	**19.9**			1.00	"	25.00		79.5	20-138		
Aniline	**18.7**			1.00	"	25.00		74.7	20-157		
Phenol	**20.7**			1.00	"	25.00		82.9	20-119		
Pentachloroethane	**11.2**			5.00	"	25.00		44.8	20-82.9		
Bis(2-chloroethyl)ether	**19.8**			1.00	"	25.00		79.0	32.6-103		
2-Chlorophenol	**19.9**			1.00	"	25.00		79.7	20-113		
1,3-Dichlorobenzene	**10.3**			1.00	"	25.00		41.3	20-79.3		
1,4-Dichlorobenzene	**10.6**			1.00	"	25.00		42.6	20-80.4		
1,2-Dichlorobenzene	**11.4**			1.00	"	25.00		45.7	20-86.2		
2-Methylphenol	**15.8**			1.00	"	25.00		63.2	31.4-115		
Bis(2-chloroisopropyl)ether	**19.7**			1.00	"	25.00		78.8	30.7-105		

RCRA, LCD, US EPA Region 5	Project: Blue Island Phenols	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Mike Beedle	Jan-04-12 13:02

Semivolatiles by GC/MS, EPA 8270C (modified) - Quality Control
US EPA Region 5 Chicago Regional Laboratory

Batch B112021 - Solvent Extraction

LCS (B112021-BS1) **Prepared: Dec-13-11 Analyzed: Dec-22-11**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
N-Nitrosopyrrolidine	18.8			1.00	ug/L	25.00		75.2	20-203		
Acetophenone	20.6			1.00	"	25.00		82.5	36.8-110		
N-Nitroso-di-n-propylamine	19.4			1.00	"	25.00		77.8	21.3-138		
o-Toluidine	18.9			1.00	"	25.00		75.4	20-120		
3-&/or 4-Methylphenol	35.6			10.0	"	50.00		71.2	45.5-106		
Hexachloroethane	8.51			1.00	"	25.00		34.0	20-70.6		
Nitrobenzene	19.6			1.00	"	25.00		78.3	33.5-109		
N-Nitrosopiperidine	20.6			1.00	"	25.00		82.3	20-140		
Isophorone	20.8			1.00	"	25.00		83.2	42.4-111		
2-Nitrophenol	21.7			1.00	"	25.00		86.7	20-125		
2,4-Dimethylphenol	4.00			1.00	"	25.00		16.0	43.1-107		
Bis(2-chloroethoxy)methane	20.6			1.00	"	25.00		82.6	34.8-114		
2,4-Dichlorophenol	21.9			1.00	"	25.00		87.6	20-131		
1,2,4-Trichlorobenzene	11.0			1.00	"	25.00		44.0	20-90		
Naphthalene	15.0			1.00	"	25.00		59.9	23.6-99.2		
2,6-Dichlorophenol	21.1			1.00	"	25.00		84.3	40.5-113		
4-Chloroaniline	19.2			1.00	"	25.00		76.9	20-148		
Hexachloropropene	4.31			1.00	"	25.00		17.2	20-85.3		
Hexachlorobutadiene	8.76			1.00	"	25.00		35.0	20-79.8		
N-Nitrosodi-n-butylamine	21.5			1.00	"	25.00		86.0	29.8-144		
4-Chloro-3-methylphenol	21.3			1.00	"	25.00		85.2	57.1-124		
Safrole	18.0			1.00	"	25.00		71.8	35.5-109		
2-Methylnaphthalene	14.4			1.00	"	25.00		57.4	20.5-109		
Hexachlorocyclopentadiene	U			5.00	"	25.00			20-108		
1,2,4,5-Tetrachlorobenzene	13.6			1.00	"	25.00		54.4	20-110		
2,4,6-Trichlorophenol	22.6			1.00	"	25.00		90.3	45.5-123		
2,4,5-Trichlorophenol	21.6			1.00	"	25.00		86.5	53-129		
Isosafrole	19.0			1.00	"	25.00		75.9	22.9-130		
2-Chloronaphthalene	15.7			1.00	"	25.00		63.0	22.8-113		
2-Nitroaniline	24.7			1.00	"	25.00		98.8	61.2-129		
Dimethylphthalate	24.3			1.00	"	25.00		97.2	20-155		
1,3-Dinitrobenzene	21.4			1.00	"	25.00		85.6	57.7-142		
2,6-Dinitrotoluene	23.4			1.00	"	25.00		93.8	63.1-125		

Environmental Protection Agency Region 5
Chicago Regional Laboratory
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RCRA, LCD, US EPA Region 5	Project: Blue Island Phenols	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Mike Beedle	Jan-04-12 13:02

Semivolatiles by GC/MS, EPA 8270C (modified) - Quality Control
US EPA Region 5 Chicago Regional Laboratory

Batch B112021 - Solvent Extraction

LCS (B112021-BS1) **Prepared: Dec-13-11 Analyzed: Dec-22-11**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Acenaphthylene	16.9			1.00	ug/L	25.00		67.5	40-113		
3-Nitroaniline	22.4			5.00	"	25.00		89.6	44.1-160		
Acenaphthene	17.7			1.00	"	25.00		70.6	36.1-115		
2,4-Dinitrophenol	18.4			1.00	"	25.00		73.7	20-179		
Pentachlorobenzene	17.9			1.00	"	25.00		71.5	34.2-119		
4-Nitrophenol	23.2			5.00	"	25.00		92.7	32-163		
Dibenzofuran	18.1			1.00	"	25.00		72.4	41.2-117		
2,4-Dinitrotoluene	24.0			1.00	"	25.00		96.1	68.4-131		
2,3,4,6-Tetrachlorophenol	22.2			1.00	"	25.00		88.9	63.2-123		
Diethylphthalate	23.4			1.00	"	25.00		93.4	23.7-145		
Fluorene	19.1			1.00	"	25.00		76.5	46.7-120		
4-Chlorophenylphenyl ether	18.3			1.00	"	25.00		73.1	44-118		
5-Nitro-o-toluidine	23.5			1.00	"	25.00		94.2	55.9-150		
4-Nitroaniline	17.6			1.00	"	25.00		70.3	48.5-154		
4,6-Dinitro-2-methylphenol	21.3			5.00	"	25.00		85.3	56-152		
Diphenylamine	21.9			1.00	"	25.00		87.6	59-124		
Azobenzene	20.8			1.00	"	25.00		83.4	47-121		
1,3,5-Trinitrobenzene	16.0			1.00	"	25.00		64.1	66.2-128		
Diallate (cis or trans)	22.1			1.00	"	25.00		88.4	52.1-122		
Phenacetin	26.0			1.00	"	25.00		104	62-146		
4-Bromophenyl phenyl ether	20.2			1.00	"	25.00		80.9	50.9-118		
Hexachlorobenzene	20.3			1.00	"	25.00		81.1	44.5-123		
Pentachlorophenol	17.1			5.00	"	25.00		68.6	48.3-140		
Pentachloronitrobenzene	21.3			1.00	"	25.00		85.1	52.9-128		
Pronamide	24.9			1.00	"	25.00		99.6	69.4-131		
Phenanthrene	20.3			1.00	"	25.00		81.2	50.1-122		
Dinoseb	19.6			5.00	"	25.00		78.2	20.1-170		
Anthracene	19.4			1.00	"	25.00		77.6	52.3-123		
Carbazole	21.2			1.00	"	25.00		84.7	58.4-138		
Di-n-butylphthalate	22.1			1.00	"	25.00		88.4	59.5-124		
Isodrin	19.7			1.00	"	25.00		78.8	25.8-149		
Fluoranthene	20.0			1.00	"	25.00		80.1	53.3-126		
Benzidine	3.87			1.00	"	25.00		15.5	20-127		

Environmental Protection Agency Region 5
Chicago Regional Laboratory
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RCRA, LCD, US EPA Region 5	Project: Blue Island Phenols	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Mike Beedle	Jan-04-12 13:02

Semivolatiles by GC/MS, EPA 8270C (modified) - Quality Control
US EPA Region 5 Chicago Regional Laboratory

Batch B112021 - Solvent Extraction

LCS (B112021-BS1) **Prepared: Dec-13-11 Analyzed: Dec-22-11**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Pyrene	**22.0**			1.00	ug/L	25.00		88.0	51.1-127		
p-Dimethylaminoazobenzene	**21.3**			1.00	"	25.00		85.4	65-125		
Chlorobenzilate	**22.5**			1.00	"	25.00		89.9	60.7-121		
3,3'-Dimethylbenzidine	**5.13**			5.00	"	25.00		20.5	20-229		
Butylbenzylphthalate	**22.4**			5.00	"	25.00		89.5	54.2-128		
2-Acetylaminofluorene	**21.1**			1.00	"	25.00		84.6	59.7-156		
Benzo (a) anthracene	**20.2**			1.00	"	25.00		80.8	48.2-124		
3,3'-Dichlorobenzidine	**20.4**			1.00	"	25.00		81.8	46.2-154		
Chrysene	**20.5**			1.00	"	25.00		82.2	49-126		
Bis(2-ethylhexyl)phthalate	**24.0**			5.00	"	25.00		96.2	20-163		
Di-n-octylphthalate	**23.1**			1.00	"	25.00		92.3	20-168		
Benzo(b)fluoranthene	**21.6**			1.00	"	25.00		86.5	29.6-149		
Benzo(k)fluoranthene	**21.8**			1.00	"	25.00		87.4	20-170		
Benzo(a)pyrene	**19.6**			1.00	"	25.00		78.6	26.7-156		
3-Methylcholanthrene	**13.7**			1.00	"	25.00		54.9	20-159		
Indeno(1,2,3-cd)pyrene	**21.5**			1.00	"	25.00		86.1	24-157		
Dibenz(a,h)anthracene	**21.8**			1.00	"	25.00		87.4	26.5-156		
Benzo(g,h,i)perylene	**22.2**			1.00	"	25.00		88.6	20-159		
Surrogate: 2-Fluorophenol	*18.3*				"	*25.00*		*73.1*	*30.6-99.6*		
Surrogate: Phenol-d5	*20.7*				"	*25.00*		*82.7*	*34.2-102*		
Surrogate: Nitrobenzene-d5	*19.9*				"	*25.00*		*79.6*	*39.5-99.5*		
Surrogate: 2-Fluorobiphenyl	*17.8*				"	*25.00*		*71.2*	*33.6-102*		
Surrogate: 2,4,6-Tribromophenol	*23.4*				"	*25.00*		*93.8*	*65.7-126*		
Surrogate: Terphenyl-d14	*21.1*				"	*25.00*		*84.6*	*60.7-121*		

LCS Dup (B112021-BSD1) **Prepared: Dec-13-11 Analyzed: Dec-22-11**

Environmental Protection Agency Region 5
Chicago Regional Laboratory
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RCRA, LCD, US EPA Region 5	Project: Blue Island Phenols	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Mike Beedle	Jan-04-12 13:02

Semivolatiles by GC/MS, EPA 8270C (modified) - Quality Control
US EPA Region 5 Chicago Regional Laboratory

Batch B112021 - Solvent Extraction

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
N-Nitrosodimethylamine	**20.3**			1.00	ug/L	25.00		81.2	21.6-121	6.98	39.5
Pyridine	**17.0**			1.00	"	25.00		68.2	20-122	8.69	82.1
2-Picoline	**16.3**			1.00	"	25.00		65.2	20-148	20.5	41.2
N-Nitrosomethylethylamine	**22.6**			1.00	"	25.00		90.2	20-121	5.51	58.1
N-Nitrosodiethylamine	**21.6**			1.00	"	25.00		86.3	20-152	9.31	33.7
Ethyl methanesulfonate	**20.3**			1.00	"	25.00		81.3	20-138	2.19	38
Aniline	**19.2**			1.00	"	25.00		76.7	20-157	2.69	51.8
Phenol	**21.5**			1.00	"	25.00		86.1	20-119	3.83	35.8
Pentachloroethane	**12.2**			5.00	"	25.00		48.7	20-82.9	8.47	45.8
Bis(2-chloroethyl)ether	**20.4**			1.00	"	25.00		81.4	32.6-103	2.99	38.4
2-Chlorophenol	**20.7**			1.00	"	25.00		82.7	20-113	3.70	38.3
1,3-Dichlorobenzene	**11.5**			1.00	"	25.00		45.8	20-79.3	10.5	44.3
1,4-Dichlorobenzene	**11.6**			1.00	"	25.00		46.4	20-80.4	8.63	41.6
1,2-Dichlorobenzene	**12.3**			1.00	"	25.00		49.1	20-86.2	7.18	40.9
2-Methylphenol	**17.7**			1.00	"	25.00		70.8	31.4-115	11.3	41.3
Bis(2-chloroisopropyl)ether	**20.1**			1.00	"	25.00		80.3	30.7-105	1.96	41.1
N-Nitrosopyrrolidine	**21.9**			1.00	"	25.00		87.6	20-203	15.1	29.8
Acetophenone	**21.4**			1.00	"	25.00		85.6	36.8-110	3.71	35.5
N-Nitroso-di-n-propylamine	**21.7**			1.00	"	25.00		87.0	21.3-138	11.2	32.1
o-Toluidine	**21.1**			1.00	"	25.00		84.4	20-120	11.2	159
3-&/or 4-Methylphenol	**39.5**			10.0	"	50.00		78.9	45.5-106	10.3	30
Hexachloroethane	**9.86**			1.00	"	25.00		39.4	20-70.6	14.7	52.7
Nitrobenzene	**20.2**			1.00	"	25.00		80.8	33.5-109	3.12	37.2
N-Nitrosopiperidine	**21.3**			1.00	"	25.00		85.4	20-140	3.67	30.4
Isophorone	**21.6**			1.00	"	25.00		86.5	42.4-111	3.91	30.3
2-Nitrophenol	**22.8**			1.00	"	25.00		91.2	20-125	5.04	38.9
2,4-Dimethylphenol	**5.35**			1.00	"	25.00		21.4	43.1-107	28.9	31.4
Bis(2-chloroethoxy)methane	**21.0**			1.00	"	25.00		83.8	34.8-114	1.44	35.7
2,4-Dichlorophenol	**22.6**			1.00	"	25.00		90.2	20-131	2.97	31.9
1,2,4-Trichlorobenzene	**12.0**			1.00	"	25.00		48.2	20-90	9.12	41.9
Naphthalene	**15.5**			1.00	"	25.00		62.1	23.6-99.2	3.54	36.8
2,6-Dichlorophenol	**21.2**			1.00	"	25.00		84.6	40.5-113	0.379	32.3
4-Chloroaniline	**21.6**			1.00	"	25.00		86.3	20-148	11.6	21
Hexachloropropene	**4.85**			1.00	"	25.00		19.4	20-85.3	11.8	40.2

Environmental Protection Agency Region 5
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RCRA, LCD, US EPA Region 5	Project: Blue Island Phenols	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Mike Beedle	Jan-04-12 13:02

Semivolatiles by GC/MS, EPA 8270C (modified) - Quality Control
US EPA Region 5 Chicago Regional Laboratory

Batch B112021 - Solvent Extraction

LCS Dup (B112021-BSD1) **Prepared: Dec-13-11 Analyzed: Dec-22-11**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Hexachlorobutadiene	**9.96**			1.00	ug/L	25.00		39.8	20-79.8	12.8	47.2
N-Nitrosodi-n-butylamine	**24.1**			1.00	"	25.00		96.5	29.8-144	11.5	20.5
4-Chloro-3-methylphenol	**22.6**			1.00	"	25.00		90.5	57.1-124	6.06	22.4
Safrole	**19.1**			1.00	"	25.00		76.5	35.5-109	6.26	34.1
2-Methylnaphthalene	**15.3**			1.00	"	25.00		61.0	20.5-109	6.15	36.1
Hexachlorocyclopentadiene	**U**			5.00	"	25.00			20-108		41.8
1,2,4,5-Tetrachlorobenzene	**14.1**			1.00	"	25.00		56.4	20-110	3.68	32.1
2,4,6-Trichlorophenol	**22.8**			1.00	"	25.00		91.4	45.5-123	1.19	17.1
2,4,5-Trichlorophenol	**22.0**			1.00	"	25.00		88.0	53-129	1.74	16.6
Isosafrole	**19.2**			1.00	"	25.00		77.0	22.9-130	1.41	22.7
2-Chloronaphthalene	**16.3**			1.00	"	25.00		65.2	22.8-113	3.43	38.3
2-Nitroaniline	**24.7**			1.00	"	25.00		98.8	61.2-129	0.00	14.4
Dimethylphthalate	**24.6**			1.00	"	25.00		98.4	20-155	1.27	10.1
1,3-Dinitrobenzene	**22.0**			1.00	"	25.00		88.0	57.7-142	2.76	14.8
2,6-Dinitrotoluene	**24.8**			1.00	"	25.00		99.4	63.1-125	5.80	11.7
Acenaphthylene	**17.7**			1.00	"	25.00		70.8	40-113	4.74	18.2
3-Nitroaniline	**25.3**			5.00	"	25.00		101	44.1-160	12.3	13.8
Acenaphthene	**18.3**			1.00	"	25.00		73.4	36.1-115	3.78	17.7
2,4-Dinitrophenol	**21.5**			1.00	"	25.00		85.9	20-179	15.2	92.6
Pentachlorobenzene	**18.4**			1.00	"	25.00		73.6	34.2-119	2.92	14.6
4-Nitrophenol	**26.7**			5.00	"	25.00		107	32-163	14.2	12
Dibenzofuran	**18.8**			1.00	"	25.00		75.4	41.2-117	3.95	15
2,4-Dinitrotoluene	**24.9**			1.00	"	25.00		99.7	68.4-131	3.64	11.2
2,3,4,6-Tetrachlorophenol	**23.1**			1.00	"	25.00		92.3	63.2-123	3.71	10.4
Diethylphthalate	**24.2**			1.00	"	25.00		96.6	23.7-145	3.41	9.17
Fluorene	**20.1**			1.00	"	25.00		80.6	46.7-120	5.14	12.9
4-Chlorophenylphenyl ether	**19.2**			1.00	"	25.00		76.7	44-118	4.86	12.8
5-Nitro-o-toluidine	**25.1**			1.00	"	25.00		100	55.9-150	6.49	13
4-Nitroaniline	**22.9**			1.00	"	25.00		91.7	48.5-154	26.4	24.2
4,6-Dinitro-2-methylphenol	**22.8**			5.00	"	25.00		91.1	56-152	6.53	15.2
Diphenylamine	**22.0**			1.00	"	25.00		88.1	59-124	0.501	9.46
Azobenzene	**20.8**			1.00	"	25.00		83.3	47-121	0.0960	10.9
1,3,5-Trinitrobenzene	**19.7**			1.00	"	25.00		78.6	66.2-128	20.4	15.8

Environmental Protection Agency Region 5
Chicago Regional Laboratory
536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

RCRA, LCD, US EPA Region 5	Project: Blue Island Phenols	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Mike Beedle	Jan-04-12 13:02

Semivolatiles by GC/MS, EPA 8270C (modified) - Quality Control
US EPA Region 5 Chicago Regional Laboratory

Batch B112021 - Solvent Extraction

LCS Dup (B112021-BSD1) **Prepared: Dec-13-11 Analyzed: Dec-22-11**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Diallate (cis or trans)	**22.4**			1.00	ug/L	25.00		89.6	52.1-122	1.30	9.73
Phenacetin	**26.5**			1.00	"	25.00		106	62-146	1.94	10.8
4-Bromophenyl phenyl ether	**20.7**			1.00	"	25.00		82.7	50.9-118	2.20	12.1
Hexachlorobenzene	**20.4**			1.00	"	25.00		81.8	44.5-123	0.786	10.2
Pentachlorophenol	**19.5**			5.00	"	25.00		78.0	48.3-140	12.9	14.4
Pentachloronitrobenzene	**22.2**			1.00	"	25.00		88.9	52.9-128	4.37	12.2
Pronamide	**25.0**			1.00	"	25.00		100	69.4-131	0.521	10
Phenanthrene	**20.2**			1.00	"	25.00		80.9	50.1-122	0.395	8.1
Dinoseb	**23.2**			5.00	"	25.00		93.0	20.1-170	17.3	14.5
Anthracene	**20.0**			1.00	"	25.00		79.8	52.3-123	2.85	8.8
Carbazole	**22.3**			1.00	"	25.00		89.2	58.4-138	5.11	9.72
Di-n-butylphthalate	**22.8**			1.00	"	25.00		91.3	59.5-124	3.25	9.27
Isodrin	**20.4**			1.00	"	25.00		81.8	25.8-149	3.74	9.61
Fluoranthene	**21.5**			1.00	"	25.00		86.0	53.3-126	7.13	10.1
Benzidine	**5.69**			1.00	"	25.00		22.8	20-127	38.1	92.5
Pyrene	**22.1**			1.00	"	25.00		88.3	51.1-127	0.272	10.3
p-Dimethylaminoazobenzene	**22.8**			1.00	"	25.00		91.3	65-125	6.70	16.6
Chlorobenzilate	**23.8**			1.00	"	25.00		95.0	60.7-121	5.54	8.64
3,3'-Dimethylbenzidine	**5.32**			5.00	"	25.00		21.3	20-229	3.64	56.8
Butylbenzylphthalate	**23.4**			5.00	"	25.00		93.7	54.2-128	4.54	8.95
2-Acetylaminofluorene	**22.7**			1.00	"	25.00		90.8	59.7-156	7.07	13
Benzo (a) anthracene	**20.8**			1.00	"	25.00		83.0	48.2-124	2.74	8.91
3,3'-Dichlorobenzidine	**23.2**			1.00	"	25.00		92.9	46.2-154	12.7	22.9
Chrysene	**21.2**			1.00	"	25.00		84.9	49-126	3.30	10.4
Bis(2-ethylhexyl)phthalate	**23.9**			5.00	"	25.00		95.6	20-163	0.542	44.8
Di-n-octylphthalate	**24.3**			1.00	"	25.00		97.1	20-168	5.07	12
Benzo(b)fluoranthene	**21.8**			1.00	"	25.00		87.4	29.6-149	0.966	26.8
Benzo(k)fluoranthene	**22.1**			1.00	"	25.00		88.4	20-170	1.18	16.2
Benzo(a)pyrene	**20.0**			1.00	"	25.00		80.0	26.7-156	1.87	11.2
3-Methylcholanthrene	**13.5**			1.00	"	25.00		54.1	20-159	1.47	13.9
Indeno(1,2,3-cd)pyrene	**22.0**			1.00	"	25.00		88.0	24-157	2.16	13.7
Dibenz(a,h)anthracene	**22.4**			1.00	"	25.00		89.4	26.5-156	2.35	13.9
Benzo(g,h,i)perylene	**22.2**			1.00	"	25.00		88.8	20-159	0.225	13.5

Environmental Protection Agency Region 5
Chicago Regional Laboratory

536 South Clark Street, Chicago, IL 60605
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RCRA, LCD, US EPA Region 5	Project: Blue Island Phenols	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Mike Beedle	Jan-04-12 13:02

Semivolatiles by GC/MS, EPA 8270C (modified) - Quality Control
US EPA Region 5 Chicago Regional Laboratory

Batch B112021 - Solvent Extraction

LCS Dup (B112021-BSD1) **Prepared: Dec-13-11 Analyzed: Dec-22-11**

Analyte	Result	Flags / Qualifiers	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Surrogate: 2-Fluorophenol	*18.2*				*ug/L*	*25.00*		*72.8*	*30.6-99.6*		
Surrogate: Phenol-d5	*22.2*				*"*	*25.00*		*88.9*	*34.2-102*		
Surrogate: Nitrobenzene-d5	*20.4*				*"*	*25.00*		*81.4*	*39.5-99.5*		
Surrogate: 2-Fluorobiphenyl	*16.8*				*"*	*25.00*		*67.4*	*33.6-102*		
Surrogate: 2,4,6-Tribromophenol	*23.3*				*"*	*25.00*		*93.2*	*65.7-126*		
Surrogate: Terphenyl-d14	*20.9*				*"*	*25.00*		*83.5*	*60.7-121*		

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RCRA, LCD, US EPA Region 5	Project: Blue Island Phenols	
77 West Jackson Boulevard	Project Number: [none]	**Reported:**
Chicago IL, 60604	Project Manager: Mike Beedle	Jan-04-12 13:02

Notes and Definitions

R	Rejected
J	The identification of the analyte is acceptable; the reported value is an estimate.
U	Not Detected
NR	Not Reported

Items for Project Manager Review

LabNumber	Analysis	Analyte	Exception
			Default Report (not modified)
			VERSION 6.08:2014
	SVOA Expanded List	(Water)	RPD calculations based on %Recovery
	SVOA Expanded List	(Water)	Special Units: (ug/L)
1112001-01	SVOA Expanded List		Sampled->Prepared > 7.00 days
1112001-01	SVOA Expanded List	Hexachlorocyclopentadiene	R: Rejected
1112001-02	SVOA Expanded List		Sampled->Prepared > 7.00 days
1112001-02	SVOA Expanded List	2,4,6-Tribromophenol	Exceeds lower control limit
1112001-02	SVOA Expanded List	Hexachlorocyclopentadiene	R: Rejected
1112001-03	SVOA Expanded List		Sampled->Prepared > 7.00 days
1112001-03	SVOA Expanded List	Hexachlorocyclopentadiene	R: Rejected
1112001-04	SVOA Expanded List		Sampled->Prepared > 7.00 days
1112001-04	SVOA Expanded List		Sampled->Prepared > 7.00 days
1112001-04	SVOA Expanded List	Hexachlorocyclopentadiene	R: Rejected
1112001-05	SVOA Expanded List		Sampled->Prepared > 7.00 days
1112001-05	SVOA Expanded List		Sampled->Prepared > 7.00 days
1112001-05	SVOA Expanded List	Hexachlorocyclopentadiene	R: Rejected
1112001-08	SVOA Expanded List		Missing 1,3,5-Trinitrobenzene
1112001-08	SVOA Expanded List		Missing 4-Chloroaniline
1112001-08	SVOA Expanded List		Soil batched as Water
1112001-08	SVOA Expanded List	2,4,6-Tribromophenol	No spike level
1112001-08	SVOA Expanded List	2-Fluorobiphenyl	No spike level
1112001-08	SVOA Expanded List	2-Fluorophenol	No spike level
1112001-08	SVOA Expanded List	Nitrobenzene-d5	No spike level
1112001-08	SVOA Expanded List	Phenol-d5	No spike level
1112001-08	SVOA Expanded List	Terphenyl-d14	No spike level
B112021-BS1	SVOA Expanded List	1,3,5-Trinitrobenzene	Exceeds lower control limit
B112021-BS1	SVOA Expanded List	2,4-Dimethylphenol	Exceeds lower control limit
B112021-BS1	SVOA Expanded List	Benzidine	Exceeds lower control limit
B112021-BS1	SVOA Expanded List	Hexachlorocyclopentadiene	Spike recovery below MDL
B112021-BS1	SVOA Expanded List	Hexachloropropene	Exceeds lower control limit
B112021-BSD1	SVOA Expanded List	1,3,5-Trinitrobenzene	Exceeds RPD control limit
B112021-BSD1	SVOA Expanded List	2,4-Dimethylphenol	Exceeds lower control limit
B112021-BSD1	SVOA Expanded List	4-Nitroaniline	Exceeds RPD control limit
B112021-BSD1	SVOA Expanded List	4-Nitrophenol	Exceeds RPD control limit
B112021-BSD1	SVOA Expanded List	Dinoseb	Exceeds RPD control limit
B112021-BSD1	SVOA Expanded List	Hexachlorocyclopentadiene	Spike recovery below MDL
B112021-BSD1	SVOA Expanded List	Hexachloropropene	Exceeds lower control limit

Sample, Log and Extraction Comments

Analysis: SVOA **Matrix**: water	
Project: Blue Island Phenols **Work Order #**: 1112001	**Analyst**: Danielle Kleinmaier **Date**: 1/4/2011

OK/DK 1-4-2012

ANALYSIS CASE NARRATIVE

Analyst Phone Number: 312.353.9771

General Information

Six water samples were originally received for the Toxicity Characteristic Leaching Procedure (TCLP) of Semi-Volatile Organic Analysis (SVOA) compounds on September 13th, 2011 (work order 1109008). On December 6th 2011, the client requested that these same samples be re-evaluated for SVOA compounds by continuous liquid-liquid extraction (work order 1112001). Since the samples had exceeded their extraction holding times, all reported re-extraction data was flagged as estimated ('J').

Sample preparation and analysis occurred via the Chicago Regional Laboratory standard operating procedure (CRL SOP) MS026 Revision # 7.0.

All the supporting data for LIMS ID 1112001-08 (BIP-7, oil phase) is located in the data package for work order 1109008.

Sample Analysis and Results

All of the samples were re-extracted except for BIP-7. Phase separation had occurred in this sample container and the aqueous phase was no longer available. The organic/oil phase was simply diluted and analyzed. Since the organic phase was not extracted, no surrogates were spiked into that fraction of the sample. Separate LIMS IDs were generated for each phase of BIP-7. The organic phase was reported as LIMS ID 1112001-08. Since the aqueous phase could not be re-extracted, LIMS IDs 1112001-06 and -07 do not appear in the report.

Quality Controls

Instrument Performance Check

The benzidine tailing factor failed the instrument performance check criteria in the DFTPP injection for the 10/31/11 sequence (6C11103101.D), affecting the waste dilution of field sample BIP-7 (LIMS ID 1112001-08). The instrument sensitivity for the basic compounds analyzed after said failed tailing factor was demonstrated by a 1 ng/uL calibration standard injection at the end of the sequence. All basic compounds were recovered with the exception of 4-chloroaniline and 1,3,5-trinitrobenzene. These two compounds do not appear in the report for LIMS ID 1112001-08.

Continuing Calibration Verification (CCV)

The closing CCV injection affecting the injections of undiluted field samples BIP-2 (LIMS ID 1112001-02), BIP-4 (LIMS ID 1112001-04), and BIP-5 (LIMS ID 1112001-05) analyzed on 12/22/11 exceeded the % difference criteria of $\leq 25\%$ for hexachlorocyclopentadiene.

The CCV injections bracketing the injection of the waste dilution of field sample BIP-7 (LIMS ID 1112001-08) analyzed on 10/31/11 exceeded the %D criteria for pentachlorophenol and benzidine.

Analysis: SVOA **Matrix**: water	
Project: Blue Island Phenols **Work Order #**: 1112001	**Analyst**: Danielle Kleinmaier **Date**: 1/4/2011

Results for these compounds were flagged as estimated ('J') in the report.

Blank Spike Recovery (B112021)

In both the blank spike and blank spike duplicate, 2,4-dimethylphenol and hexachloropropene had calculated recoveries below their respective lower control limits. Neither of these compounds were detected in any of the field samples. These compounds were flagged as estimated ('J') in the report.

Hexachlorocyclopentadiene was not recovered in either blank spike QC sample. This compound was not detected in any of the field samples and was, thus, rejected.

All other quality controls not mentioned here passed the SOP criteria.

Signature _____ Date_____

Environmental Protection Agency Region 5
Chicago Regional Laboratory

536 South Clark Street, Chicago, IL 60605
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WORK ORDER

1112001

Printed: 12/12/2011 4:23:37PM

US EPA Region 5 Chicago Regional Laboratory

Client: RCRA, LCD, US EPA Region 5
Project: Blue Island Phenols
Project Manager: Angela Ockrassa
Project Number: [none]

Report To:
Mike Beedle
RCRA, LCD, US EPA Region 5
77 West Jackson Boulevard
Chicago, IL 60604
Phone: 3-7922
Fax: (312)353-4342

Date Due: Jan-23-12 15:00 (45 day TAT)
Received By: Amanda Wroble
Date Received: Dec-06-11 12:37
Logged In By: Amanda Wroble
Date Logged In: Dec-06-11 12:37

Samples Received at:

Sample tags/labels	Yes
Seals Intact	Yes
Received on ice	Yes
Paperwork Included	Yes

Analysis	Due	TAT	Expires	Comments
1112001-01 BIP-1 [Water] Sampled Sep-13-11 09:15 Central				
SVOA Expanded List	Jan-07-12 12:00	30	Sep-20-11 09:15	
1112001-02 BIP-2 [Water] Sampled Sep-13-11 09:21 Central				
SVOA Expanded List	Jan-07-12 12:00	30	Sep-20-11 09:21	
1112001-03 BIP-3 [Water] Sampled Sep-13-11 09:29 Central				
SVOA Expanded List	Jan-07-12 12:00	30	Sep-20-11 09:29	
1112001-04 BIP-4 [Water] Sampled Sep-13-11 10:07 Central				
SVOA Expanded List	Jan-07-12 12:00	30	Sep-20-11 10:07	
1112001-05 BIP-5 [Water] Sampled Sep-13-11 10:18 Central				
SVOA Expanded List	Jan-07-12 12:00	30	Sep-20-11 10:18	
1112001-06 BIP-7 [Water] Sampled Sep-13-11 11:17 Central				
SVOA Expanded List	Jan-07-12 12:00	30	Sep-20-11 11:17	
1112001-07 BIP-7, 9008-07 aqueous phase [Water] Sampled Sep-13-11 11:17 Central				
SVOA Expanded List	Jan-07-12 12:00	30	Sep-20-11 11:17	
1112001-08 BIP-7, 9008-07 oil phase [Soil] Sampled Sep-13-11 11:17 Central				
SVOA Expanded List	Jan-07-12 12:00	30	Sep-27-11 11:17	

Reviewed By

Date

1112001

US EPA Region 5 Chicago Regional Laboratory

Client:	**RCRA, LCD, US EPA Region 5**	**Project Manager:**	**Angela Ockrassa**
Project:	**Blue Island Phenols**	**Project Number:**	**[none]**

Reviewed By

Date

SVOA Blue Island Phenols LLE 12-13-11 LK

TC spike LIMS ID 112131
surr spike LIMS ID 112132
DCM LIMS ID 111020101 (-BLK1, -BS1, -BSD1, -01, -02, -03)
10902103 (-04, -05)
10N NaOH LIMS ID 112121
1:1 H_2SO_4 - H_2O LIMS ID 102140

LIMS ID	Field ID	Volume (mL)	TC spike (µL)	surr spike (µL)
111200101-01	BIP-1	240*	~~500~~ DK 12/13/11	500
111200101-02	BIP-2	80*		500
111200101-03	BIP-3	165*		500
111200101-04°	BIP-4	210*		500
111200101-05°	BIP-5	260*		500
111200101-07#	BIP-7 aqueous phase			
B112021-BLK1		1000		1000
B112021-BS1		1000	500	500
B112021-BSD1		1000	500	500

no sample left to extract.
* brought up to 1 L with reagent H_2O
° concentrated down to < 10 mL in boiling flask during base extraction; possible leak.

Acid extraction start: 12-13-11 @ 6:05 pm
stop: 12-14-11 @ 12:05 pm
Base extraction start: 12-14-11 @ 4:30 pm
stop: 12-15-11 @ 10:30 am

Continued on Page

Read and Understood By

Signed Date Signed Date

Environmental Protection Agency Region 5
Chicago Regional Laboratory
536 South Clark Street, Chicago, IL 60605
Phone:(312)353-8370 Fax:(312)886-2591

Date: 12/13/2011

Semivolatiles / non-volatiles in WATER extraction bench sheet

Date: 12-13-11 Analyst(s): DK

Extraction Method: continuous liquid-liquid (X) solid-phase ( ) separatory funnel ( )

Extract concentration by: turbovap LV (X) turbovap 500 ( ) N-evap (X)

Spiking Solution(s) Added By: DK

Batch Number: B112021
Analyses Included On This Benchsheet
SVOA Expanded List

Surrogate 1: 1121312 Amount: 500uL

Sample Number	Source ID for duplicate or MS/MSD	LCS/MS Spike ID	LCS/MS Spike Amount (µL)	Sample Amount (mL)	Volume of Extract (mL)*	Dil 1	Dil 2	Dil 3	Final Volume of Extract (mL)**	Comments
1112001-01				240	1					
1112001-02				80	1					
1112001-03				165	1					
1112001-04				210	1	50x				
1112001-05				260	1	100x				
1112001-08				0.11424	100					
B112021-BLK1				1000	1					
B112021-BSD1		1121311	500	1000	1					
B112021-BS1		1121311	500	1000	1					

* VOLUME AFTER CONCENTRATION; **AFTER ALL DILUTIONS

Reagent(s) Used: NaCl ( ) Na_2SO_4 ( ) 10 N NaOH (X) 1:1 H_2SO_4-H_2O (X) Other (list):

CLEANUP: GPC( ) OTHERS:

Internal standard LIMS ID: 122103

Calibration standard LIMS ID: 121310 d.1 12/21/11

Reagent LIMS IDs or manufacturer / part # / lot # (NOTE: LIMS IDs required for all prepared solutions): 10N NaOH: LIMS ID 121211; 1:1 H_2SO_4-H_2O: LIMS ID 1021401

Solvent(s) Used: Methylene Chloride (X) Acetone ( ) Hexane ( ) Methanol ( ) Acetonitrile ( ) Ethyl Acetate ( ) Other (list)

Solvent lot #s: LIMS ID 111020 (-BLK1, -BS1, -BSD1, -01, -02, -03) & 1090103 (-04, -05)

Batch Comments: recirculating hot water bath: 159°F = 70.5°C

Comments: TurboVap LV water bath: 96°F = 35.6°C
N-Evap water bath: 97°F = 36.1°C